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Table of FOOD COMPOSITION

• for the

ARMED FORCES

BUREAU OF HUMAN NUTRITION
AND HOME ECONOMICS

U. S. DEPARTMENT OF AGRICULTURE

United States
Department of
Agriculture



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TABLE OF FOOD COMPOSITION FOR THE ARMED FORCES

Prepared by

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Bureau of Human Nutrition and Home Economics 1/
United States Department of Agriculture

Data on the composition of foods used by the armed forces are needed for dietary planning and for assessing the nutritive adequacy of rations used and of available food supplies.

This publication, prepared at the request of The Quartermaster General, presents composition data for some 800 food items in terms of proximate constituents, three minerals, and five vitamins. It includes special ration components used by the armed forces, for which the values have been based on averages of analyses or on calculations from the specifications for the item. Specification numbers and dates have been included for some items. The publication covers many foods common to both military and civilian users, for which values have been adapted from Agriculture Handbook 8 2/. In addition, figures for a few items have been compiled from published and unpublished data that have become available since the publication of Agriculture Handbook 8.

SIGNS AND SYMBOLS USED. Parentheses denote imputed values for which little or no experimental evidence was available, for which there was relatively little basis for imputing a value from another form of the food, or for which reported data were not considered suitable. A zero in parentheses is used where actual data were lacking and the amount of a constituent present was regarded as none or probably too little to measure.

Dashes show that no basis could be found for imputing a value although there was some reason to believe that a measurable amount of the constituent might be present.

The word "Trace" is used to indicate vitamin values that would round to zero with the number of decimal places carried in these tables. For other components that would round to zero, a zero is used. A zero followed by a decimal point indicates that there may be up to 0.5 of the unit present but bases for showing the amount were inadequate. Numbers with or without decimal points indicate that the average has been rounded to the nearest whole number or in the case of vitamin A to the nearest multiple of ten.

1/ Acknowledgment is made to the Staff of The Quartermaster Food and Container Institute for the Armed Forces, Research and Development Branch, Office of The Quartermaster General for their cooperation in making available unpublished analytical data on the composition of ration components.

2/ Composition of Foods--Raw, Processed, Prepared. Agriculture Handbook 8, 147 pages. June 1950.

Composition of Foods Used by the Armed Forces

Food and description	Water content of edible portion	Refuse in food as purchased	Nutrients in edible portion of 1 pound of food as purchased										
			Food energy	Protein	Fat	Total carbohydrate	Calcium	Iron	Vitamin A value	Thiamine	Riboflavin	Niacin value	Ascorbic acid
	Pct.	Pct.	Cal.	Gm.	Gm.	Gm.	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	
MEAT, FISH, POULTRY, AND MIXTURES:													
Bacon, medium fat, raw:													
Sliced	20.	0	2,857	41.3	295.	5.0	59	3.6	(0)	1.73	0.54	8.7	0
Slab	20.	6	2,692	38.9	278.	4.7	56	3.4	(0)	1.62	.50	8.2	0
Bacon, canned	15.6	0	3,144	39.5	328.7	2.7	68	6.4	(0)	1.07	.44	6.7	0
Bacon, Canadian, raw	56.	0	1,047	100.3	68.	1.4	59	15.0	(0)	4.15	1.11	23.5	0
Beans with frankfurter chunks in tomato sauce, canned (ML-B-1065A, 3-31-50).	69.7	0	723	35.0	41.8	52.7	154	10.4	910	.28	.32	6.0	Trace
Beef and corn. See Meat and corn.													
Beef and gravy, canned, Type II, unbraised (JAN-B-723, 1-27-49).	67.3	0	813	84.4	46.8	7.7	86	12.3	170	.17	.87	16.4	0
Beef and pork dinner, canned (JAN-B-618, 5-27-48).	62.5	0	919	107.6	49.5	3.2	154	(13.)	120	.23	1.00	14.2	(0)
Beef and pork loaf, canned (JAN-B-753, 4-21-49).	55.3	0	1,258	91.3	92.2	9.1	127	12.3	110	.08	.82	13.5	0
Beef and vegetables, with gravy, canned (JAN-B-736, 2-25-49).	75.1	0	556	51.8	26.3	25.4	50	11.4	8,580	.08	.52	12.8	Trace
Beef, boneless, frozen (4-way) (ML-B-10017, 10-20-49):													
Diced	60.0	0	1,226	77.2	99.4	0.	45	11.8	200	.33	.69	18.6	0
Ground	58.6	0	1,309	76.3	109.0	0.	45	11.8	220	.33	.68	18.3	0
Roasts or steaks, dry heat	60.1	0	1,242	79.0	100.3	0.	45	11.8	200	.34	.70	19.0	0
Blade roll	58.8	0	1,301	75.4	108.5	0.	45	11.4	220	.33	.67	18.2	0
Inside of round	63.1	0	1,077	85.4	79.0	0.	50	12.7	160	.36	.76	20.4	0
Knuckle of round	71.2	0	745	88.1	40.9	0.	54	13.2	80	.38	.79	21.2	0
Loin strip	55.4	0	1,452	75.4	125.3	0.	45	10.9	250	.33	.67	18.1	0
Sirloin butt	56.2	0	1,438	74.0	124.4	0.	45	10.9	250	.32	.66	17.8	0
Spencer roll	57.6	0	1,388	76.7	117.6	0.	45	11.8	240	.33	.68	18.4	0
Tenderloin	55.3	0	1,469	69.9	129.8	0.	41	10.4	260	.30	.63	16.8	0
Roasts or steaks, moist heat	63.0	0	1,108	81.3	84.4	0.	45	12.3	170	.35	.72	19.4	0
Chuck roll	65.7	0	977	83.1	69.0	0.	45	12.7	140	.35	.74	19.9	0
Chuck tender	71.0	0	745	87.2	41.3	0.	54	13.2	80	.38	.78	21.0	0
Clod	62.0	0	1,148	80.8	89.0	0.	45	11.8	180	.35	.72	19.3	0
Outside of round	64.2	0	1,044	84.4	75.8	0.	50	12.7	150	.36	.75	20.2	0
Rump butt	55.1	0	1,531	70.8	136.2	0.	41	10.9	270	.30	.63	17.0	0

Beef, carcass or side, including kidney

fat, wholesale, raw:

Thin	19	764	69.2	52.	0.	40	10.3	130	.30	.61	16.6	0
Medium fat	16	1,042	66.7	84.	0.	38	9.9	200	.29	.59	16.0	0
Fat	15	1,243	62.9	108.	0.	35	9.3	250	.27	.56	15.1	0
Very fat	12	1,641	54.8	156.	0.	32	8.4	350	.24	.49	13.2	0
Beef, carcass or side, trimmed to retail, medium fat, raw.	16	919	69.4	69.	0.	42	10.3	160	.30	.62	16.6	0
Beef, corned, boneless:												
Uncooked, medium fat	0	1,334	71.7	114.	0.	41	10.9	170	.15	.67	7.9	0
Canned:												
Lean	0	837	119.9	36.	0.	95	20.4	50	.07	1.12	16.1	0
Medium fat	0	978	114.9	54.	0.	91	19.5	80	.07	1.07	15.4	0
Fat	0	1,195	106.7	82.	0.	86	18.2	120	.06	.99	14.3	0
Beef cuts, medium fat, raw:												
Chuck:												
With bone	13	882	73.5	63.	0.	43	11.1	130	.32	.66	17.6	0
Without bone	0	1,019	84.4	73.	0.	50	12.7	150	.36	.75	20.2	0
Flank:												
With bone	2	1,100	88.6	80.	0.	53	13.4	160	.38	.79	21.3	0
Without bone	0	1,125	90.3	82.	0.	54	13.6	160	.39	.80	21.7	0
Porterhouse:												
With bone	14	1,157	64.0	98.	0.	39	9.8	200	.28	.57	15.4	0
Without bone	0	1,346	74.5	114.	0.	45	11.4	230	.32	.66	17.9	0
Rib:												
With bone	21	1,016	62.5	83.	0.	36	9.3	170	.27	.56	15.0	0
Without bone	0	1,275	79.0	104.	0.	45	11.8	210	.34	.70	19.0	0
Round:												
With bone	10	747	79.8	45.	0.	45	11.9	90	.34	.71	19.1	0
Without bone	0	829	88.5	50.	0.	50	13.2	100	.38	.79	21.2	0
Rump:												
With bone	26	1,080	54.4	94.	0.	30	8.1	190	.24	.48	13.1	0
Without bone	0	1,459	73.5	127.	0.	41	10.9	250	.32	.65	17.7	0
Sirloin:												
With bone	10	1,043	71.	82.	0.	41	10.6	160	.30	.63	17.0	0
Without bone	0	1,158	79.	91.	0.	45	11.8	180	.34	.70	18.8	0
Beef dried, or chipped	0	923	155.7	28.6	0.	91	23.2	40	(.32)	(1.45)	(17.3)	0
Beef, hamburger:												
Raw	0	1,457	73.	127.	0.	41	10.9	250	.31	.64	17.4	0
Canned (MIL-H-1048A, 6-30-50):												
Type I, without gravy	0	1,043	109.0	64.0	0.	104	15.4	130	.07	1.04	20.0	0
Type II, with gravy	0	737	75.4	44.5	9.1	54	11.8	390	.09	.87	17.3	0

Composition of Foods Used by the Armed Forces--Continued

Food and description	Water content of edible portion	Refuse in food as purchased	Nutrients in edible portion of 1 pound of food as purchased										
			Food en-ergy	Protein	Fat	Total carbo-hydrate	Calcium	Iron	Vitamin A value	Thia-mine	Ribo-flavin	Niacin value	Ascor-bic acid
	Pct.	Pct.	Cal.	Gm.	Gm.	Gm.	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
MEAT, FISH, POULTRY, AND MIXTURES--													
Continued													
Ham, fresh and cured. See Pork.	59.6	0	1,155	69.9	95.	--	41	10.4	(0)	2.04	0.74	14.5	0
Ham, whole, canned	70.4	0	641	62.2	27.7	32.7	118	5.9	40	.12	.61	13.1	(0)
Hamburger. See Beef.													
Hash, corned beef, canned													
(JAN-H-750, 3-31-49).	6.6	0	2,036	187.5	89.4	111.2	204	22.2	310	.56	1.60	48.3	(0)
Hash, corned beef, dehydrated, canned													
(JAN-681, 9-30-48).													
Hash, meat and vegetable, canned	73.0	0	581	44.5	25.9	40.9	82	5.4	40	.20	.50	11.3	27
(MIL-H-1081A, 3-30-50).													
Heart:													
Beef, lean, raw	77.6	0	491	76.7	16.8	3.2	41	20.9	140	2.65	4.02	35.3	27
Calf, canned, strained (infant food) ..	82.7	0	366	60.8	11.4	.9	54	16.3	--	.29	3.71	20.2	--
Chicken, raw	69.6	0	713	93.1	31.8	7.3	104	7.7	140	.56	4.12	23.6	27
Pork, raw	76.8	0	531	76.7	21.8	1.8	159	12.3	140	1.94	5.63	27.5	27
Herring, Atlantic, raw:													
Whole	67.2	49	443	42.5	29.0	0.	--	2.6	270	.05	.35	8.0	--
Flesh only	67.2	0	867	83.1	56.8	0.	--	5.0	520	.10	.68	15.7	--
Herring, lake, raw:													
Whole	74.0	44	357	47.0	17.3	0.	30	1.3	(250)	.22	.23	8.0	--
Flesh only	74.0	0	637	84.0	30.9	0.	54	2.3	(450)	.39	.41	14.2	--
Herring, Pacific, flesh only, raw	79.6	0	428	75.4	11.8	0.	--	--	450	.10	.99	(10.0)	--
Herring, salted	58.1	0	843	89.0	51.3	0.	--	3.6	500	.05	.51	11.6	0
Herring, smoked, kippered	61.0	0	959	100.8	58.6	0.	300	(6.4)	0	Trace	1.26	(13.2)	--
Kidneys, raw:													
Beef	74.9	0	639	68.1	36.8	4.1	41	35.9	5,220	1.70	11.56	29.2	59
Pork	77.1	0	518	74.0	20.9	3.6	50	36.3	590	2.65	7.88	44.6	59
Sheep	77.8	0	475	75.4	15.0	4.5	59	41.8	(5,220)	2.32	11.00	33.6	59
Knockwurst sausage	57.6	0	1,262	64.0	105.3	10.0	36	9.5	(0)	.77	.95	11.8	0
Lamb:													
Carcass or side, raw:													
Thin	66.3	31	646	53.5	46.3	0.	31	8.1	--	.48	.66	15.5	0
Medium fat	55.8	22	1,122	55.6	98.1	0.	32	8.5	--	.50	.69	16.1	0
Fat	46.2	19	1,526	47.8	146.5	0.	29	7.4	--	.43	.59	13.8	0

Composition of Foods Used by the Armed Forces--Continued

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Food and description	Water content of edible portion	Refuse in food as purchased	Nutrients in edible portion of 1 pound of food as purchased										Ascorbic acid
			Food energy	Protein	Fat	Total carbohydrate	Calcium	Iron	Vitamin A value	Thiamine	Riboflavin	Niacin value		Mg.
MEAT, FISH, POULTRY, AND MIXTURES--	Pct.	Pct.	Cal.	Gm.	Gm.	Gm.	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
Continued													
Meat food product bar, dehydrated (QMC Pur. Descr. 8-10-50):	5.9	0	2,743	205.2	207.0	0.	86	32.2	160	1.50	1.91	55.8	0
Types I and II	72.4	0	590	46.3	25.0	44.0	163	6.8	2,300	.14	.54	11.4	0
Meat, ground, and spaghetti, canned (MIL-M-1078A, 3-24-50).	80.5	0	380	44.5	9.5	25.4	427	25.4	1,450	.66	.90	5.4	--
Oysters, shucked, meat only	81.7	0	340	37.7	11.4	20.4	127	27.2	1,450	.53	.90	5.4	--
Oysters, canned	57.	65	453	32.1	35.	0.	19	4.8	(0)	1.56	.38	8.3	0
Pigs' feet, raw	66.9	44	520	42.4	37.6	(0.)	--	--	(0)	--	--	--	0
Pigs' feet, pickled													
Pilchards, canned. See Sardines.													
Pork and applesauce, canned (MIL-P-1076A, 2-9-50).	51.7	0	1,207	58.6	75.4	73.1	14	5.4	(0)	.82	.64	14.5	(0)
Pork and corn, canned. See Meat and corn, canned.													
Pork and eggs, chopped, canned (JAN-P-724, 1-27-49).	55.7	0	1,343	69.0	114.0	4.5	218	12.7	2,920	.85	1.16	6.4	0
Pork and gravy, canned, Type II, unbraised (MIL-P-1044A, 4-13-50).	63.5	0	1,024	72.6	76.3	6.4	95	6.4	150	.90	1.07	13.0	(0)
Pork, canned, strained (infant food)	75.7	0	577	77.6	27.2	0.	64	7.7	(0)	1.57	1.26	21.5	0
Pork, carcass, packers', fresh:													
Thin	50.	18	1,397	52.5	130.	0.	30	7.8	(0)	2.55	.61	13.7	0
Medium	42.	12	1,827	47.6	180.	0.	28	7.2	(0)	2.31	.56	12.4	0
Fat	35.	10	2,201	40.1	225.	0.	25	6.1	(0)	1.95	.47	10.4	0
Pork, corned, with carrots and apples, canned (C.Q.D. No. 383, 8-3-45).	49.7	0	1,516	74.0	126.7	15.0	73	10.4	4,270	.67	.86	9.8	(0)
Pork, cured:													
Ham, smoked 1/ (medium fat), raw:													
With bone	42.	13	1,535	66.8	138.	(1.2)	40	9.9	(0)	2.76	.74	15.6	0
Without bone	42.	0	1,767	76.7	159.	(1.4)	45	11.4	(0)	3.17	.85	17.9	0
Ham, boiled, sliced	47.8	0	1,372	103.5	103.1	0.	41	12.3	(0)	3.52	1.03	18.8	0
Salt pork, raw:													
Medium fat	14.	7	3,007	26.2	321.	0.	Trace	3.8	(0)	1.21	.30	5.9	0
Fat	8.	4	3,419	17.0	371.	0.	Trace	2.6	(0)	.78	.19	3.8	0

Food and description	Water content of edible portion	Refuse in food as purchased	Nutrients in edible portion of 1 pound of food as purchased										Ascorbic acid
			Food energy	Protein	Fat	Total carbohydrate	Calcium	Iron	Vitamin A	Thiamine	Riboflavin	Niacin value	
	Pct.	Pct.	Cal.	Gm.	Gm.	Gm.	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
MEAT, FISH, POULTRY, AND MIXTURES--													
Continued													
Sausage patties, pork, canned (MIL-S-3262, 7-28-50):													
Type I, without gravy	55.4	0	1,358	69.5	117.6	0.	118	10.0	--	0.91	1.09	13.6	0
Type II, with gravy	58.5	0	1,212	76.3	95.8	5.4	141	10.0	(0)	.95	1.04	13.4	0
Sausage, pork:													
Canned (MIL-S-1104A, 3-30-50):													
Type I, meat (bulk)	55.4	0	1,359	69.9	117.6	0.	41	10.4	(0)	.91	1.09	13.6	0
Type II, links	60.3	0	1,207	62.2	104.4	--	36	9.1	(0)	.82	.95	12.3	0
Smoked	59.0	0	1,243	65.8	106.7	0.	36	9.5	(0)	.82	1.00	12.7	0
Sausage, other. See kind as													
Braunschweiger, Cervelat, etc.													
Scallops, raw (edible muscle)	80.3	0	355	67.2	.5	15.4	118	8.2	0	(.18)	.44	6.4	--
Shad or American shad, raw, whole	70.2	52	367	40.8	21.4	0.	--	1.1	--	(.34)	.52	(18.4)	--
Shrimp, canned:													
Dry pack or drained solids of wet pack.	66.2	0	577	121.7	6.4	--	522	14.1	260	.04	.15	10.1	--
Wet pack, total contents of can	75.6	0	405	84.9	4.1	1.4	268	8.2	270	.04	.14	6.2	--
Shrimp, frozen (MIL-S-3051, 9-23-49)	77.3	0	390	87.6	1.8	--	340	9.1	270	.24	.63	10.0	--
Stew, beef, canned. See Beef stew, canned.													
Stew, meat and vegetable, canned (MIL-S-1030A, 4-11-50).	72.7	0	577	52.7	23.6	37.7	163	15.9	10,500	.20	.54	11.6	21
Swordfish, raw, flesh only	75.8	0	536	87.2	18.2	0.	86	4.1	7,200	.24	.22	41.3	--
Thuringer sausage (FP-S-749, 2-22-43)	48.2	0	1,401	87.2	111.7	5.4	50	13.2	(0)	.50	1.41	20.0	0
Tongue:													
Raw, beef, medium fat	68.	5	892	70.7	65.	1.7	39	12.1	(0)	.53	1.24	21.6	(0)
Canned, pork (JAN-T-1033, 3-24-49)	52.2	0	1,393	91.7	110.8	.5	173	13.2	(0)	.35	.94	6.7	(0)
Tuna fish, canned:													
Total contents of can	52.5	0	1,318	108.1	94.9	0.	32	5.4	(990)	(.19)	(.44)	(48.8)	(0)
Drained solids, 1 pound, E.P. 1/	60.0	0	898	131.7	37.2	0.	(36)	6.4	390	.23	.53	58.3	0
Solids from total contents of can; refuse 14 percent liquid.	60.0	14	772	113.1	32.0	0.	31	5.5	330	.20	.45	50.1	0
Turkey, raw:													
Dressed, medium fat	58.3	33	815	61.1	61.4	0.	70	11.6	--	.26	.43	24.3	(0)
Ready-to-cook	58.3	19	986	74.0	74.3	0.	85	14.0	--	.32	.52	29.4	(0)

Turkey, boned, canned, with broth (MIL-C-1058A, 4-13-50).	64.0	0	930	100.8	55.4	0.	73	17.3	--	.05	.75	16.6	(0)
Teal, raw:													
Carcass or side excluding kidney fat:													
Thin	71.	23	547	69.0	28.	0.	38	10.5	--	.50	.92	23.1	0
Medium fat	68.	21	681	68.6	43.	0.	39	10.4	--	.50	.91	23.0	0
Fat	65.	19	823	68.1	59.	0.	40	10.3	--	.50	.91	22.8	0
Carcass or side excluding kidney fat, boneless:													
Thin	71.	0	706	89.4	36.	0.	50	13.6	--	.65	1.19	30.0	0
Medium fat	68.	0	857	86.7	54.	0.	50	13.2	--	.63	1.15	29.1	0
Fat	65.	0	1,017	84.0	73.	0.	50	12.7	--	.61	1.12	28.1	0
Retail items 2/, medium fat:													
Cutlet, boned (wholesale round)	70.	0	743	88.5	41.	0.	50	13.2	--	.64	1.18	29.6	0
Shoulder roasts (wholesale chuck) ...	70.	20	625	70.4	36.	0.	40	10.5	--	.52	.94	23.6	0
Stew meat, without bone	64.	0	1,049	83.1	77.	0.	50	12.3	--	.61	1.10	27.8	0
Veal, canned, strained (infant food)	81.2	0	380	72.6	7.7	0.	64	7.3	--	.14	1.36	25.0	0
Vienna sausage, canned (MIL-S-3069, 10-26-49).	63.2	0	1,080	57.7	88.1	10.0	32	8.6	(0)	.45	.55	13.9	0
EGGS:													
Eggs, hen, fresh or stored:													
Whole; refuse, shells	74.0	11	655	51.7	46.5	2.8	218	10.9	4,590	.39	1.17	.3	0
Eggs, hen, frozen (JAN-E-1037, 4-29-49):													
Whole	74.0	0	736	58.1	52.2	3.2	245	12.3	5,180	.45	1.32	.5	0
White only	87.8	0	227	49.0	0.	3.6	27	.9	(0)	0	1.17	(.5)	0
Yolk only	49.4	0	1,640	74.0	144.8	3.2	667	32.7	14,590	1.24	1.58	Trace	0
Eggs, hen, dried, powdered (MIL-E-1075A, 5-17-50):													
Type I, whole egg	2.	0	2,773	218.8	196.6	12.3	890	41.3	17,510	1.57	5.63	1.1	0
Type II, egg white	3.	0	1,806	390.0	0.	28.6	218	7.3	0	0	9.31	3.0	0
Type IV, whole egg for noodle manufacture.	5.	0	2,689	212.5	190.7	11.4	863	40.0	16,970	1.52	4.79	1.1	0
Egg yolk, hen, dried	3.	0	3,145	141.6	277.8	5.9	1,280	62.7	25,170	2.26	3.02	.3	0
MILK AND MILK PRODUCTS OTHER THAN BUTTER:													
Cheese:													
Blue mold, domestic type	40.	0	1,669	97.6	138.5	9.1	1,430	(2.3)	(5,630)	.12	2.77	2.0	(0)
Camembert	52.2	0	1,356	79.4	112.1	8.2	477	2.3	(4,630)	.18	3.42	4.8	(0)
Cheddar	37.	0	1,806	113.5	146.2	9.5	3,292	4.5	6,360	.11	1.91	.1	(0)

1/ Not on as purchased basis.

2/ Values for raw items are from the medium fat wholesale cuts considered to be nearest approximations for indicated retail items.

Food and description	Water content of edible portion	Refuse in food as purchased	Nutrients in edible portion of 1 pound of food as purchased										
			Food energy	Protein	Fat	Total carbohydrate	Calcium	Iron	Vitamin A value	Thiamine	Riboflavin	Niacin value	Ascorbic acid
	Pct.	Pct.	Cal.	Gm.	Gm.	Gm.	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
MILK AND MILK PRODUCTS OTHER THAN BUTTER--Continued													
Cheese---Continued													
Cheese, dehydrated, process, bulk (JAN-C-1047, 3-24-49).	4.0	0	2,683	168.4	217.0	14.5	4,890	6.4	9,440	0.12	2.96	0.1	(0)
Cheese foods, cheddar	43.	0	1,479	93.1	109.0	31.8	2,588	3.2	4,860	(.11)	2.62	.7	(0)
Cheese, processed, canned (MIL-C-10381 (Q.M.C.), 7-14-50).	40.	0	1,680	105.3	136.2	8.6	3,055	4.1	(5,900)	.07	1.85	(.1)	(0)
Cheese, processed, with bacon, canned (MIL-C-10381 (Q.M.C.), 7-14-50).	38.0	0	1,759	105.8	144.4	8.6	2,833	5.0	5,460	.25	1.83	1.7	(0)
Cheese spreads. See Butter and other spreads.													
Cottage, from skim milk	76.5	0	433	88.5	2.3	9.1	436	1.4	(90)	.09	1.39	(.5)	(0)
Cream cheese	51.	0	1,686	40.9	168.0	9.1	309	.9	(6,580)	(.05)	1.01	.3	(0)
Limburger	45.	0	1,567	96.2	127.1	10.0	2,679	2.7	5,810	.36	2.27	.7	(0)
Parmesan	30.	0	1,786	163.4	118.0	13.2	5,266	1.8	(4,810)	.09	3.31	1.0	(0)
Swiss	39.	0	1,680	124.8	127.1	7.7	4,200	4.1	6,580	.03	(1.82)	(.2)	(0)
Swiss, processed	40.	0	1,614	119.9	122.1	7.3	4,027	4.1	6,310	.03	1.82	.2	(0)
Cream:													
Light, table or coffee (20 percent fat)...	72.5	0	925	13.2	90.8	18.2	440	.3	3,750	.14	.64	.4	5
Heavy or whipping (35 percent fat)	59.	0	1,497	10.4	158.9	14.5	354	.2	6,510	.11	.51	.3	3
Ice cream:													
Plain	62.1	0	938	18.2	56.8	93.5	558	.5	2,360	.19	.85	.5	5
Mix (JAN-I-705, 12-8-48):													
Type I, powdered	2.0	0	2,303	52.7	126.7	249.2	1,911	.9	5,210	.41	2.84	1.7	6
Type II, paste	28.0	0	1,697	41.8	94.0	178.9	1,503	.5	3,900	.32	2.25	1.4	5
Milk, cow:													
Fluid (pasteurized and raw):													
Whole	87.0	0	309	15.9	17.7	22.2	536	.3	(720)	.16	.78	.5	6
Nonfat (skim)	90.5	0	162	15.9	.5	23.2	558	.3	(20)	.16	.81	.5	6
Buttermilk, cultured (made from skim milk).	90.5	0	162	15.9	.5	23.2	(536)	.3	20	.16	.81	.5	6
Canned:													
Evaporated (unsweetened)	73.7	0	625	31.8	35.9	44.9	1,103	.8	1,820	.22	1.63	.9	5
Condensed (sweetened)	27.0	0	1,455	36.8	38.1	248.8	1,239	.9	(1,930)	.24	1.77	.9	5
Chocolate flavored	83.0	0	336	14.5	10.0	48.1	495	.3	410	.15	.72	.5	5

Dried:

Whole	3.5	0	2,233	117.1	121.2	172.5	4,308	2.6	6,360	1.38	6.63	3.0	29
Nonfat solids (skim)	3.5	0	1,643	161.6	4.5	236.1	5,902	2.6	(190)	1.60	8.88	5.2	32
Modified, sweetened (MIL-4-3260, 7-27-50).	3.1	0	1,932	107.6	55.8	253.8	4,308	2.7	2,910	1.00	6.72	2.0	14
Half and half (milk and cream)	79.7	0	620	14.5	54.5	20.4	490	.3	2,230	.15	.71	.5	5
Malted 1/:													
Dry powder or tablets	2.6	0	1,850	66.3	38.6	321.0	1,303	9.5	4,640	1.48	2.43	--	(0)
Beverage	78.2	0	472	20.9	20.0	53.6	613	1.4	1,140	.30	.95	--	5
Milk, goat, fluid	87.4	0	305	15.0	18.2	20.9	586	.5	(720)	.18	.49	1.3	5
Whey:													
Fluid	93.2	0	120	4.1	1.4	23.2	232	.5	50	.16	.66	.3	--
Dried	6.2	0	1,562	56.8	5.4	328.7	3,083	--	220	2.24	11.3	3.9	--

BUTTER AND OTHER SPREADS:

Army spread, canned (JAN-S-1032, 3-25-49).	28.4	0	2,580	21.8	268.8	32.2	713	2.3	13,010	.14	.89	.4	0
Butter	15.5	0	3,251	2.7	367.7	1.8	91	.0	2/15,000	--	--	--	0
Carter's spread, canned (JAN-S-1032, 3-25-49).	13.	0	3,251	2.3	367.7	1.4	77	.0	20,080	.01	.04	.4	0
Cheese spreads, canned (made with butter and cheese) (JAN-C-595, 5-12-48):													
Plain	33.8	0	2,202	51.8	221.6	8.6	1,539	1.8	9,230	.05	.97	.2	0
With bacon	34.5	0	2,198	56.8	222.0	--	1,539	2.7	8,850	.17	.90	1.9	0
With ham	32.3	0	2,234	57.7	219.3	14.5	1,389	3.2	8,490	.28	.89	2.1	0
With ham and relish	34.0	0	2,114	54.5	202.5	26.8	1,280	3.6	7,840	.28	.84	2.1	(0)
Oleomargarine (Q.M.C. Pur. Descr. 11-29-49)	15.5	0	3,269	2.7	367.7	1.8	91	.0	3/15,000	--	--	--	(0)

OTHER FATS AND OIL DRESSINGS:

French dressing	39.6	0	1,788	2.7	161.2	92.2	(0)	(.0)	(0)	(0)	(0)	(0)	(0)
Lard	0.	0	4,095	0.	454.	0.	0	.0	0	0	0	0	0
Mayonnaise	16.	0	3,212	6.8	354.1	13.6	86	4.5	950	.16	.16	(0)	0
Oils, salad or cooking	0.	0	4,013	0.	454.	0.	0	.0	0	0	0	0	0
Salad dressing (commercial)	44.7	0	1,743	5.0	167.1	63.1	41	1.8	660	.07	.14	(0)	0
Shortening products (vegetable fat)	0.	0	4,013	0.	454.	0.	0	.0	0	0	0	0	0

1/ Based on unfortified products.

2/ Year-round average.

3/ Based on the average vitamin A content of fortified margarine. Most of the margarines manufactured for use in the United States have 15,000 I.U. of vitamin A added per pound. The minimum Federal specifications for fortified margarine require the addition of 9,000 I.U. of vitamin A per pound. The unfortified margarine contains a negligible amount of vitamin A.

Food and description	Water content of edible portion	Refuse in food as purchased	Nutrients in edible portion of 1 pound of food as purchased										
			Food energy	Protein	Fat	Total carbohydrate	Calcium	Iron	Vitamin A	Thiamine	Riboflavin	Niacin value	Ascorbic acid
SUGARS, SIRUPS, AND OTHER SWEETS:	Pct.	Pct.	Cal.	Gm.	Gm.	Gm.	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
Apple butter	53.1	0	834	1.8	3.6	206.1	64	2.7	(0)	0.05	0.09	0.7	8
Candy, commercial:													
Candied or glaze peel:													
Citron	18.0	0	1,424	.9	1.4	364.1	377	3.6	--	--	--	--	--
Ginger root, crystallized	12.	0	1,542	1.4	.9	395.4	--	--	--	--	--	--	--
Lemon, orange, or grapefruit peel	17.4	0	1,434	1.8	1.4	365.9	--	--	--	--	--	--	--
Butterscotch	5.0	0	1,861	0.	40.4	388.6	91	8.2	(0)	(0)	Trace	Trace	(0)
Caramels	7.0	0	1,883	13.2	52.7	351.8	572	10.4	770	.09	.64	.5	Trace
Chocolate, sweetened, milk	1.1	0	2,283	(27.)	152.1	252.9	981	4.1	680	.45	1.73	3.6	(0)
Chocolate, sweetened, milk, almonds .....	.6	0	2,414	(36.3)	175.2	227.0	935	9.5	650	.59	2.32	(5.0)	(0)
Chocolate creams	9.	0	1,791	18.2	63.6	327.	--	--	--	--	--	--	(0)
Fondant	8.	0	1,598	0.	0.	413.	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Marshmallows	15.	0	1,477	13.6	0.	368.	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Peanut brittle	2.	0	2,004	37.7	70.4	330.5	173	9.1	140	.41	.23	22.2	(0)
Candy, armed forces:													
Almond chocolate bar (with special protein) (MIL-F-2413, 9-5-50).	2.1	0	2,294	79.0	134.4	222.5	608	9.5	Trace	.64	1.36	6.4	0
Candy, hard, nonsugared (MIL-C-3034, 8-30-49):													
With ascorbic acid	1.0	0	1,740	0	0	449.5	(0)	(0)	(0)	(0)	(0)	(0)	1,070
Without ascorbic acid	1.0	0	1,740	0	0	449.5	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Caramel nougat bar (MIL-C-1424, 9-30-49)	7.0	0	1,733	19.1	55.8	341.0	436	(1.8)	Trace	.23	.73	(2.3)	0
Chocolate bar, sweet (with special protein) (MIL-F-2413, 9-5-50).	1.1	0	2,217	54.5	117.6	260.6	1,040	3.2	40	1.91	1.43	2.1	0
Chocolate caps (AT-1 Pur. Descr. 5-16-49).	.7	0	2,233	9.1	150.3	272.4	136	(1.8)	Trace	.13	.25	2.2	0
Chocolate covered coconut bars (MIL-C-1424, 9-30-49).	7.0	0	2,095	14.5	111.2	290.6	95	(4.5)	0	.11	.16	1.6	0
Chocolate crisp (AT-1 Pur. Descr. 5-16-49).	1.0	0	2,289	30.4	146.6	264.7	781	4.5	590	.27	1.23	4.1	0
Chocolate drops, pan-coated (MIL-C-3045, 9-16-49).	1.5	0	2,093	13.6	97.6	316.0	763	1.8	Trace	.36	.91	1.4	0
Chocolate sticks (AT-1 Pur. Descr. 5-16-49).	1.2	0	2,304	27.2	136.7	273.8	622	4.1	680	.31	.59	1.6	0

Chocolate, sweet, Type I, bar or disc (MIL-C-1323, 7-25-49):	1.2	0	2,243	31.3	124.4	281.0	1,067	3.6	80	1.92	1.68	1.7	0
Class 1, containing no milk fat, thiamine added.	1.1	0	2,337	21.8	143.0	272.9	717	3.6	1,000	1.92	1.17	1.3	0
Class 2, containing milk fat, thiamine added.													
Chocolate, sweet, enriched, Types I and II, bars and discs (Q.M.C. Pur. Descr. 9-28-50):	1.2	0	2,243	31.3	124.4	281.0	1,067	3.6	80	1.92	1.68	1.7	0
Class 1, containing no milk fat, thiamine added.	1.2	0	2,223	22.7	122.1	291.5	767	4.1	1,060	1.92	1.25	1.4	0
Class 2, containing milk fat, thiamine added.	(1.0)	0	1,740	(0)	(0)	(449.5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Coffee confection (MIL-R-2406, 8-24-50)	3.5	0	1,698	Trace	Trace	437.7	23	1.8	0	0	Trace	Trace	0
Cream centers, pan-coated (MIL-C-3046, 9-16-49).	4.7	0	1,720	9.0	26.3	389.5	236	2.3	Trace	.05	.73	.5	0
Fudge bar, chocolate (MIL-C-1424, 9-30-49).	--	0	1,464	--	--	378.2	0	--	(0)	(0)	(0)	(0)	(0)
Gum, candy-coated, chewing (MIL-C-10022 (Q.M.C.), 10-26-49).	6.7	0	1,674	0	Trace	422.7	Trace	Trace	0	Trace	Trace	0	Trace
Gum drops, sanded (MIL-C-3046, 9-16-49)	2.5	0	2,020	42.7	72.6	323.2	118	3.2	0	.40	.21	25.6	0
Peanuts, pan-coated (MIL-C-3046, 9-16-49)	3.6	0	1,653	3.2	1.4	429.0	136	4.1	90	.13	.14	.9	(0)
Raisins, pan-coated (MIL-C-3046, 9-16-49)	10.0	0	1,622	0	Trace	403.6	Trace	Trace	0	0	0	0	0
Starch jelly bar (MIL-C-1424, 9-30-49).	39.0	0	954	(5.4)	5.0	257.0	1/ (68)	(6.4)	--	--	--	--	--
Chocolate sirup													
Citron. See Candy, commercial.	1.6	0	1,725	42.7	.0	402.7	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Dessert powder, prepared with gelatin (C.Q.D. No. 157B, 2-23-45, Amend. 1, 2-7-47).	3.4	0	1,724	2.7	.5	434.9	5	.2	(0)	.01	.01	.2	0
Dessert powder, prepared with starch (C.Q.D. No. 196A, 2-23-45, Amend. 1, 2-7-47).													
Honey, strained or extracted	20.	0	1,333	1.4	0.	360.9	23	4.1	(0)	.02	.17	1.0	16
Jams, marmalades, preserves	28.	0	1,263	2.3	1.4	321.4	54	1.4	50	.07	.11	.7	26
Jellies	34.5	0	1,145	.9	.0	295.1	(54)	(1.4)	(50)	(.07)	(.11)	(.7)	17
Molasses, cane:													
First extraction or light	24.	0	1,142	--	--	2/295.1	749	19.5	--	.32	.29	1.1	--
Second extraction or medium	24.	0	1,054	--	--	2/272.4	1,317	27.2	--	--	.55	5.4	--
Third extraction or blackstrap	24.	0	966	--	--	2/249.7	2,629	51.3	--	3/	.81	7.3	--
Barbados	24.	0	1,230	--	--	2/317.8	--	--	--	.26	.91	--	--

1/ Calcium may not be available because of presence of oxalic acid.

2/ Total sugars.

3/ Values found for blackstrap molasses range from 0.05 to 3.63 mg. per pound.

Composition of Foods Used by the Armed Forces--Continued

Food and description	Water content of edible portion	Refuse in food as purchased	Nutrients in edible portion of 1 pound of food as purchased										
			Food energy	Protein	Fat	Total carbohydrate	Calcium	Iron	Vitamin A value	Thiamine	Riboflavin	Niacin value	Ascorbic acid
	Pct.	Pct.	Cal.	Gm.	Gm.	Gm.	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
SUGARS, SIRUPS, AND OTHER SWEETS--													
Continued													
Sirup, table blends (chiefly corn sirup).	25.	0	1,300	(0.)	(0.)	(336.0)	209	18.6	0	0	0.05	0.5	(0)
Sugars:													
Granulated, cane or beet .....	.5	0	1,748	(0.)	(0.)	451.7	--	--	(0)	(0)	(0)	(0)	(0)
Powdered .....	.5	0	1,748	(0.)	(0.)	451.7	--	--	(0)	(0)	(0)	(0)	(0)
Brown	3.	0	1,678	(0.)	(0.)	433.6	1/ 345	11.8	(0)	(0)	(0)	(0)	(0)
Dextrose (including refined corn sugar):													
Anhydrous .....	.5	0	1,748	(0.)	(0.)	451.7	--	--	(0)	(0)	(0)	(0)	(0)
Hydrous	10.	0	1,583	(0.)	(0.)	409.	--	--	(0)	(0)	(0)	(0)	(0)
Maple	7.5	0	1,583	--	--	(409.)	--	--	--	--	--	--	--
CEREALS AND OTHER GRAIN PRODUCTS:													
Barley, pearled, light, dry	11.1	0	1,583	37.2	4.5	357.8	73	(9.1)	(0)	.55	.37	14.1	0
Biscuits, baking powder, made with:													
Unenriched flour	27.0	0	1,550	37.2	48.1	237.0	990	2.3	0	.22	.40	2.1	0
Enriched flour	27.0	0	1,550	37.2	48.1	237.0	990	8.2	0	1.04	1.01	8.9	0
Enriched self-rising flour	28.0	0	1,516	36.3	49.5	226.5	999	8.2	0	1.07	1.04	9.2	0
Biscuits, canned, unbaked	38.6	0	1,303	31.3	40.4	199.3	835	6.8	0	1.10	.89	8.4	0
Biscuit, Type V. See Crackers, with fortified yeast.													
Bran (breakfast cereal, almost wholly bran).	2.6	0	1,097	54.5	15.4	336.9	427	46.8	(0)	1.68	1.76	87.2	(0)
Bran flakes (40 percent bran)	3.6	0	1,328	49.0	8.6	357.8	277	23.2	(0)	2.10	1.04	39.7	(0)
Bran, raisin	6.4	0	1,350	40.9	8.2	356.8	272	21.8	(0)	1.75	.85	31.8	(0)
Breads, commercial:													
Boston brown bread made with degermed corn meal:													
Unenriched	44.5	0	995	21.8	9.5	208.8	840	11.4	630	.38	.56	6.2	0
Enriched	44.5	0	995	21.8	9.5	208.8	840	13.2	630	.60	.78	8.8	0

Composition of Foods Used by the Armed Forces--Continued

13

Food and description	Water content of edible portion	Refuse in food as purchased	Nutrients in edible portion of 1 pound of food as purchased										
			Food energy	Protein	Fat	Total carbohydrate	Calcium	Iron	Vitamin A value	Thiamine	Riboflavin	Niacin value	Ascorbic acid
	Pct.	Pct.	Cal.	Gm.	Gm.	Gm.	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
CEREALS AND OTHER GRAIN PRODUCTS--													
Continued													
Cakes:													
Angel food	31.6	0	1,225	38.1	1.4	266.5	27	1.4	0	0.04	0.61	0.8	(0)
Foundation	25.1	0	1,591	26.8	53.1	253.8	572	2.3	1/ 700	.14	.36	1.1	(0)
Foundation, plain icing	24.1	0	1,551	22.7	42.2	274.2	459	1.8	1/ 560	.11	.32	.9	(0)
Foundation, fudge icing	24.4	0	1,584	20.0	52.2	265.6	445	1.8	1/ 530	.11	.36	1.0	(0)
Fruit, dark	22.9	0	1,610	23.6	62.7	253.8	440	12.7	1/ 710	.64	.65	5.0	(0)
Plain cake and cupcakes	26.8	0	1,484	29.1	37.2	258.8	704	1.8	1/ 560	.13	.38	1.3	(0)
Plain cake and cupcakes, iced	25.2	0	1,463	23.6	28.1	281.9	531	1.8	1/ 420	.10	.32	1.0	(0)
Pound, canned (MIL-P-3234, 6-26-50) ...	15.2	0	2,200	27.2	138.0	216.1	136	6.4	2,570	.18	.41	.9	(0)
Rich	21.6	0	1,782	22.7	80.4	246.1	477	2.7	1/ 950	.14	.38	.9	(0)
Rich, plain icing	21.4	0	1,716	20.0	66.7	264.2	400	2.3	1/ 790	.11	.34	.8	(0)
Sponge	31.8	0	1,322	35.9	22.7	247.0	127	6.4	2,380	.25	.69	.7	(0)
Cereal biscuit (Q.M.C. Pur. Descr., 10-4-50, Change #1, 10-11-50).	10.0	0	1,840	45.4	57.2	296.9	495	13.2	1,130	1.01	.62	3.4	0
Cereal, breakfast, prepared (ready-to-eat). See Breakfast foods, mixed cereals, and individual grains as Corn, Oatmeal, etc.													
Cereal, compressed, pre-mixed (thiamine added) (AT-1 Pur. Descr., 5-16-49):													
Block A	2.4	0	2,037	50.4	60.8	320.1	831	15.0	Trace	8.0	1.27	22.0	0
Block B	3.6	0	2,008	74.9	69.5	278.3	867	16.3	Trace	8.0	1.56	9.3	0
Cereal foods (infant food):													
Dry, precooked	5.7	0	1,651	64.5	10.9	333.2	2,956	153.9	(0)	5.41	2.07	2/22.2	(0)
See also Oatmeal (infant food).													
Cereal, pre-mixed (with sugar and dried milk) (JAN-C-1045, 3-24-49).	3.5	0	1,845	61.3	38.6	310.1	1,308	11.4	Trace	.95	2.04	13.2	0
Cookies:													
Apple cookie bar (with special protein) (MIL-F-2413, 9-5-50).	7.0	0	1,900	40.0	56.3	314.2	141	12.7	1,320	.32	.32	2.3	Trace
Coconut cookie bar (with special protein) (MIL-F-2413, 9-5-50).	6.1	0	2,089	44.9	89.4	279.2	173	7.7	1,590	.32	.45	2.7	Trace

Date cookie bar (with special protein) (ML-F-2413, 9-5-50).	5.9	0	1,926	41.8	57.2	316.9	259	9.5	1,320	.36	.23	3.2	Trace
Fig-filled bar	13.8	0	1,587	19.1	21.8	344.1	313	5.9	0	.11	.27	4.1	(0)
Fruit bar (ML-R-2406, 8-24-50)	2.5	0	1,644	21.3	24.1	376.4	381	23.2	12,670	.23	.51	11.8	Trace
High-carbohydrate cereal bar (ML-R-2406, 8-24-50).	8.0	0	1,802	24.5	40.0	346.4	436	8.6	4,290	.10	.25	3.8	Trace
Oatmeal, chocolate chip (JAN-C-1029, 3-24-49).	4.4	0	2,092	(25.9)	101.2	294.6	236	8.2	330	.51	.37	2.3	0
Plain and assorted	4.8	0	1,978	27.2	57.7	340.5	100	2.7	(0)	.16	.15	2.3	(0)
Sandwich, butterscotch type (JAN-C-1043, 3-23-49).	3.8	0	2,204	24.5	99.0	307.4	204	4.1	0	.24	.37	3.3	0
Corn and soy grits, ready-to-eat (added thiamine and niacin).	2.7	0	1,501	81.7	1.4	341.0	300	28.6	(0)	3.04	.54	9.5	(0)
Corn flakes	3.6	0	1,748	36.8	1.8	385.9	50	5.9	(0)	.16	.45	7.1	(0)
Corn flakes (added thiamine, niacin, and iron).	3.6	0	1,748	36.8	1.8	385.9	50	10.0	(0)	1.88	.45	10.1	(0)
Corn flour	12.	0	1,672	35.4	11.8	348.7	27	8.2	3/1,540	.93	.25	(6.4)	(0)
Corn grits, white or yellow, degermed, dry:													
Unenriched	12.	0	1,642	39.5	3.6	354.6	18	4.5	4/1,360	.59	.18	5.2	(0)
Enriched 5/	12.	0	1,642	39.5	3.6	354.6	18	13.	4/1,360	2.0	1.2	16.	(0)
Corn meal, white or yellow, dry:													
Whole ground:													
Unbolted	12.	0	1,611	41.8	17.7	334.6	45	10.9	6/2,320	1.74	.50	9.1	(0)
Bolted	12.	0	1,642	40.9	15.4	338.2	27	8.2	6/2,020	1.36	.35	8.6	(0)
Degermed:													
Unenriched	12.	0	1,650	35.9	5.4	355.9	27	5.0	6/1,360	.61	.21	4.7	(0)
Enriched 5/	12.	0	1,650	35.9	5.4	355.9	27	13.	6/1,360	2.0	1.2	16.	(0)
Self-rising:													
Unenriched	12.	0	1,544	39.5	16.8	321.4	1,189	10.4	6/2,200	1.63	.47	8.6	(0)
Enriched 5/	12.	0	1,544	39.5	16.8	321.4	1,189	13.	6/2,200	2.0	1.2	16.	(0)

1/ If the fat used in the recipe is butter or fortified margarine, the vitamin A value per pound would be 2,450 I.U. in foundation cake; 1,950 I.U. in foundation cake, iced; 1,940 I.U. in foundation cake, fudge icing; 1,860 I.U. in dark fruit cake; 1,680 I.U. in plain cake; 1,270 I.U. in plain cake, iced; 4,490 I.U. in pound cake; 3,770 I.U. in rich cake; and 3,130 I.U. in rich cake, iced.

2/ Based on products ranging from 11.4 to 30.0 mg. per pound of cereal. The niacin value of some products is as high as 104 mg.

3/ Vitamin A based on yellow corn flour; white corn flour contains only a trace.

4/ Vitamin A based on yellow corn grits; white corn grits contain only a trace.

5/ Iron, thiamine, riboflavin, and niacin are based on the minimum levels of enrichment specified in the standards of identity promulgated under the Food, Drug, and Cosmetic Act.

6/ Vitamin A based on yellow corn meal; white corn meal contains only a trace.

Food and description	Water content of edible portion	Refuse in food as purchased	Nutrients in edible portion of 1 pound of food as purchased										
			Food energy	Protein	Fat	Total carbohydrate	Calcium	Iron	Vitamin A value	Thiamine	Riboflavin	Niacin value	Ascorbic acid
	Pct.	Pct.	Cal.	Gm.	Gm.	Gm.	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
CEREALS AND OTHER GRAIN PRODUCTS--													
Continued													
Crackers:													
Graham	5.5	0	1,785	36.3	45.4	337.3	91	8.6	(0)	1.36	0.54	6.8	(0)
Saltines	4.6	0	1,955	41.8	53.6	322.8	86	4.5	(0)	.28	.20	4.7	(0)
Soda, plain	5.7	0	1,909	43.6	43.6	330.1	91	5.0	(0)	.29	.21	4.9	(0)
Crackers, with fortified yeast (MIL-C-1324A, 4-11-50).	4.3	0	2,032	41.3	68.1	312.4	173	5.9	0	3.59	4.09	11.8	0
Cracker meal. See Crackers, soda.													
Doughnuts, cake type, made with unenriched flour 1/.	18.7	0	1,927	30.0	95.3	239.3	331	2.7	630	.17	.37	1.3	(0)
Doughnut mix, made with unenriched flour 2/.	11.5	0	1,688	35.9	21.8	335.1	363	3.6	880	.31	.51	2.3	(0)
Farina, raw:													
Unenriched	10.5	0	1,678	49.5	3.6	351.4	127	4.5	(0)	.25	.28	3.8	(0)
Enriched 3/	10.5	0	1,678	49.5	3.6	351.4	127	6.	(0)	1.66	1.2	6.	(0)
Flour. See Corn, Rye, Wheat flours, etc.													
Gingerbread	30.4	0	1,486	17.7	54.5	234.3	518	11.4	450	.19	.37	4.5	(0)
Hominy, dehydrated, white or yellow (MIL-H-832, 7-27-49).	6.	0	1,755	42.2	4.1	378.6	18	5.0	4/1,450	.63	.20	5.8	(0)
Hominy, dry. See also Corn grits.													
Macaroni, dry:													
Unenriched	8.6	0	1,712	58.1	6.4	347.3	100	6.8	(0)	.42	.27	9.2	(0)
Enriched 3/	8.6	0	1,712	58.1	6.4	347.3	100	13.	(0)	4.	1.7	27.	(0)
Noodles (containing egg), dry:													
Unenriched	9.6	0	1,728	57.2	15.4	332.3	100	9.5	890	.91	.50	10.4	(0)
Enriched 3/	9.6	0	1,728	57.2	15.4	332.3	100	13.	890	4.	1.7	27.	(0)
Oat cereal, ready-to-eat (added vitamins and minerals).	4.0	0	1,797	65.8	31.8	318.7	726	18.6	(0)	3.70	.87	3.5	(0)
Oatmeal or rolled oats:													
Dry	8.3	0	1,770	64.5	33.6	309.6	241	20.4	(0)	2.71	.62	4.7	(0)
Precooked (infant food), dry 5/	6.6	0	1,701	68.1	22.7	311.9	3,596	143.0	(0)	5.71	1.57	10.5	(0)
Pancake mix, dry, self-rising:													
Wheat (mixed with other flours):													
Unenriched	10.4	0	1,584	43.1	6.4	331.9	2,111	9.1	0	.66	.33	6.4	(0)
Enriched	10.4	0	1,584	43.1	6.4	331.9	2,111	15.0	0	1.78	1.40	13.0	(0)
Buckwheat	11.2	0	1,450	47.7	8.6	319.2	2,120	14.1	0	1.66	.50	10.0	(0)

Pastry, shell, plain. See Pie crust.

Pies:

Apple	47.8	0	1,115	9.5	43.1	179.3	32	1.8	730	.14	.08	1.1	5
Blueberry	52.7	0	981	9.5	31.3	170.2	45	2.3	530	.07	.14	1.1	16
Cherry	46.2	0	1,147	10.9	44.5	183.4	45	1.8	1,730	.12	.08	1.1	6
Coconut custard	58.5	0	927	23.6	39.5	119.4	568	5.4	1,030	.23	.74	1.4	(0)
Custard	58.5	0	927	23.6	39.5	119.4	568	5.4	1,030	.23	.74	1.4	(0)
Lemon meringue	47.4	0	1,143	16.3	45.9	169.8	91	2.3	790	.15	.38	.9	4
Mince	43.0	0	1,146	11.4	31.3	207.0	73	10.0	30	.31	.16	1.6	3
Pumpkin	58.9	0	919	19.1	43.6	117.1	245	3.6	8,660	.15	.53	1.5	1
Pie crust, unbaked (fresh or frozen)	20.5	0	1,946	30.0	107.6	212.0	41	1.8	0	.20	.09	2.2	(0)
Popcorn:													
Unpopped	9.8	0	1,645	54.0	21.3	327.3	(45)	(11.4)	(0)	(1.77)	(.50)	(9.5)	(0)
Popped	4.0	0	1,751	57.7	22.7	348.2	(50)	(12.3)	(0)	(1.77)	(.54)	(10.0)	(0)
Pretzels	8.0	0	1,675	40.0	14.5	338.2	(54)	(3.2)	(0)	(.05)	(.18)	(3.2)	(0)
Rice, raw:													
Brown	12.0	0	1,634	34.0	7.7	352.8	177	9.1	(0)	1.43	.23	21.0	(0)
Converted	12.3	0	1,644	34.5	1.4	360.5	109	3.6	(0)	.92	.15	17.4	(0)
White or milled	12.3	0	1,644	34.5	1.4	360.5	109	3.6	(0)	.30	.12	7.4	(0)
Precooked, dry	7.6	0	1,734	40.0	.9	378.2	18	3.9	(0)	.09	.07	.5	(0)
Rice products:													
Flakes	3.5	0	1,782	26.8	2.7	398.2	95	8.2	(0)	.36	.39	4.1	(0)
Flakes (added thiamine and niacin)	3.5	0	1,782	26.8	2.7	398.2	95	8.2	(0)	2.09	.39	25.0	(0)
Puffed	3.5	0	1,782	26.8	2.7	398.2	95	8.2	(0)	.36	.39	4.1	(0)
Puffed (added thiamine and niacin)	3.5	0	1,782	26.8	2.7	398.2	95	8.2	(0)	2.09	.39	25.0	(0)
Rice, wild. See Wild rice.													
Rolls:													
Plain:													
Unenriched (pan rolls)	28.5	0	1,406	40.9	25.0	250.2	250	3.2	0	.25	.49	4.4	(0)
Enriched (pan rolls) 3/	28.5	0	1,406	40.9	25.0	250.2	250	8.0	0	1.1	.7	10.0	(0)
Sweet:													
Unenriched	28.4	0	1,466	38.6	35.4	244.3	286	2.7	0	.25	.60	4.6	(0)
Enriched 3/	28.4	0	1,466	38.6	35.4	244.3	286	8.0	0	1.1	.7	10.0	(0)

1/ When made with enriched flour, doughnuts contain 6.4 mg. of iron, 0.72 mg. of thiamine, 0.59 mg. of riboflavin, and 5.7 mg. of niacin per pound.

2/ When made with enriched flour, doughnut mix contains 9.1 mg. of iron, 1.27 mg. of thiamine, 1.11 mg. of riboflavin, and 9.1 mg. of niacin per pound.

3/ Iron, thiamine, riboflavin, and niacin are based on the minimum levels of enrichment specified in the standards of identity promulgated under the Food, Drug, and Cosmetic Act.

4/ Vitamin A based on yellow corn hominy; white corn hominy contains only a trace.

5/ The niacin value is based on products ranging from 6.4 to 19.5 mg. per pound of cereal. The niacin value of some products is as high as 103.5 mg. per pound.

Food and description	Water content of edible portion	Refuse in food as purchased	Nutrients in edible portion of 1 pound of food as purchased										
			Food energy	Protein	Fat	Total carbohydrate	Calcium	Iron	Vitamin A value	Thiamine	Riboflavin	Niacin value	Ascorbic acid
	Pct.	Pct.	Cal.	Gm.	Gm.	Gm.	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	
CEREALS AND OTHER GRAIN PRODUCTS--													
Continued													
Rye bread. See Breads.													
Rye flour:													
Light	11.	0	1,625	42.7	4.5	353.7	100	5.0	(0)	0.67	0.31	2.9	(0)
Medium	11.	0	1,587	51.8	7.7	339.6	(123)	11.8	(0)	1.35	.54	11.2	(0)
Dark	11.	0	1,502	74.0	11.8	309.2	245	20.4	(0)	2.76	.99	12.2	(0)
Rye meal or whole grain	11.	0	1,518	54.9	7.7	333.2	(173)	16.8	(0)	1.94	1.02	7.1	(0)
Rye wafers or "Swedish health bread"	6.5	0	1,537	56.3	5.4	341.9	227	20.0	(0)	1.45	.91	5.7	(0)
Shortbread	4.0	0	2,289	30.9	110.8	291.9	45	1.8	0	.16	.08	2.1	(0)
Spaghetti, dry:													
Unenriched	8.6	0	1,712	58.1	6.4	347.3	100	6.8	(0)	.42	.27	9.2	(0)
Enriched 1/	8.6	0	1,712	58.1	6.4	347.3	100	13.	(0)	4.	1.7	27.	(0)
Starch (including arrowroot, corn, etc.).	12.	0	1,644	2.3	.9	395.0	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Tapioca, dry	12.6	0	1,634	2.7	.9	392.3	54	(4.5)	(0)	(0)	(0)	(0)	(0)
Tortillas	41.9	0	958	26.3	(12.7)	220.6	504	10.0	2/ 940	.88	.27	4.4	--
Vermicelli. See Macaroni.													
Wheat, whole grain: 3/													
Hard red spring	13.0	0	1,498	63.6	10.0	313.7	163	14.1	(0)	2.59	.54	19.5	(0)
Hard red winter	12.5	0	1,499	55.8	8.2	325.5	209	15.4	(0)	2.35	.53	19.5	(0)
Soft red winter	14.0	0	1,480	46.3	9.1	327.3	191	15.9	(0)	1.95	.50	(16.3)	(0)
White	11.5	0	1,523	42.7	9.1	342.3	163	13.6	(0)	2.41	.54	24.1	(0)
Durum	13.0	0	1,506	57.7	11.4	318.3	168	19.5	(0)	3.00	.54	(20.0)	(0)
Wheat flours:													
Whole (from hard wheats)	12.	0	1,511	60.4	9.1	322.3	186	15.0	(0)	2.49	.54	19.7	(0)
80-percent extraction (from hard wheats).	12.	0	1,656	54.5	5.9	336.4	109	5.9	(0)	1.16	.33	9.3	(0)
Straight, hard wheat	12.	0	1,656	53.6	5.4	338.2	91	6.4	(0)	.53	.32	6.5	(0)
Straight, soft wheat	12.	0	1,654	44.0	4.5	349.1	91	5.0	(0)	.36	.23	5.5	(0)
Self-rising:													
Unenriched	12.	0	1,588	41.8	4.5	335.1	1,235	4.5	(0)	.35	.21	5.2	(0)
Enriched 4/	12.	0	1,588	41.8	4.5	335.1	1,235	13.0	(0)	2.0	1.2	16.0	(0)
Patent:													
All-purpose or family flour:													
Unenriched	12.	0	1,654	47.7	4.5	345.5	73	3.6	(0)	.28	.21	4.1	(0)
Enriched 1/	12.	0	1,654	47.7	4.5	345.5	73	13.0	(0)	2.0	1.2	16.0	(0)

Bread flour:											
Unenriched	12.	0	1,656	53.6	5.0	339.1	73	4.1	(0)	.35	4.4
Enriched 1/.....	12.	0	1,656	53.6	5.0	339.1	73	13.0	(0)	2.0	16.0
Cake or pastry flour	12.	0	1,653	34.0	3.6	360.5	77	2.3	(0)	.14	3.0
Wheat products:											
Bran breakfast cereals. See Bran.											
Flakes	3.8	0	1,613	49.0	7.3	364.1	209	13.6	(0)	.38	21.8
Flakes (added iron, thiamine, and niacin).	3.8	0	1,613	49.0	7.3	364.1	209	19.1	(0)	2.54	29.1
Germ	11.0	0	1,640	114.4	45.4	224.7	381	36.8	(0)	9.31	20.9
Puffed	3.8	0	1,613	49.0	7.3	364.1	209	13.6	(0)	.38	21.8
Puffed (added iron, thiamine, and niacin).	3.8	0	1,613	49.0	7.3	364.1	209	19.1	(0)	2.54	29.1
Rolled, dry	10.1	0	1,545	44.9	9.1	345.9	163	14.5	(0)	1.65	18.6
Shredded:											
Plain	5.6	0	1,635	45.9	11.4	363.7	213	15.9	(0)	1.02	20.0
With added malt and sugar	3.8	0	1,610	40.0	5.4	375.9	227	19.1	(0)	5/ .82	20.2
Whole meal, dry	8.2	0	1,564	57.7	7.7	341.9	209	15.4	(0)	2.50	20.0
Whole meal, dry (added wheat germ, iron, and thiamine).	11.0	0	1,527	58.1	9.1	328.7	227	136.2	(0)	6.81	23.6
Wheat and malted barley cereal, ready-to-eat (added thiamine and niacin).	2.8	0	1,764	49.9	2.7	375.9	213	15.9	(0)	2.41	21.3
Wild rice, parched, raw	8.5	0	1,604	64.0	3.2	341.9	86	--	(0)	2.02	27.9
MATURE BEANS AND OTHER LEGUMES (PULSES);											
NUTS:											
Almonds, dried, unblanched:											
Shelled	4.7	0	2,711	84.4	245.6	89.0	1,153	20.0	0	1.12	20.8
In shell; refuse, shells	4.7	49	1,386	43.2	125.5	45.5	589	10.2	0	.57	10.6
Almonds, roasted	2.5	0	2,764	85.8	248.8	94.4	1,135	22.2	Trace	.26	19.6
(Indiv. Frigid Trail Ration Pur. Descr., 8-8-50).											

1/ Iron, thiamine, riboflavin, and niacin are based on the minimum levels of enrichment specified in the standards of identity promulgated under the Food, Drug, and Cosmetic Act.

2/ Vitamin A value of tortillas made from yellow corn; tortillas made from white corn have no vitamin A value.

3/ Proximate constituents adjusted to moisture content of wheat as it reaches the mill prior to tempering.

4/ Iron, thiamine, riboflavin, and niacin are based on the minimum levels of enrichment specified in the standards of identity promulgated under the Food, Drug, and Cosmetic Act. Calcium is based on the level usually found in self-rising flour which is in excess of the minimum (500 mg. per pound) required. See page 41.

5/ For brands that are oven-toasted thiamine will be 0.20 mg.

Food and description	Water content of edible portion	Refuse in food as purchased	Nutrients in edible portion of 1 pound of food as purchased										
			Food energy	Protein	Fat	Total carbohydrate	Calcium	Iron	Vitamin A value	Thiamine	Riboflavin	Niacin value	Ascorbic acid
	Pct.	Pct.	Cal.	Gm.	Gm.	Gm.	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
MATURE BEANS AND OTHER LEGUMES (PULSES):													
NUTS--Continued													
Beans, common or kidney, mature dry seeds:													
Pinto and red Mexican, raw	8.1	0	1,584	104.4	5.4	289.2	740	31.3	0	2.95	1.07	9.2	8
Red kidney:													
Raw	12.2	0	1,526	104.9	7.7	269.7	740	31.3	(0)	2.58	.98	11.5	8
Canned (or cooked), total contents of can.	76.0	0	408	25.9	1.8	74.5	182	8.6	(0)	.22	.21	3.6	0
Other (including navy, pea bean, white marrow, other):													
Raw	11.5	0	1,537	97.2	7.3	279.7	740	31.3	0	3.06	1.04	9.9	8
Canned beans with pork (JAN-B-665, 8-20-48):													
Type I, oven-baked, with pork and molasses.	70.0	0	566	26.3	13.6	87.2	254	9.5	150	.22	.16	2.1	11
Type II, pork and tomato sauce	71.7	0	513	26.3	9.5	83.5	186	8.2	380	.22	.16	2.1	11
Beans, lima, mature dry seeds	12.6	0	1,514	94.0	5.9	279.7	309	34.0	0	2.18	.80	8.9	8
Black-eyed peas. See Cowpeas, mature seeds, dry.													
Brazil nuts:													
Shelled	5.3	0	2,934	65.4	299.2	49.9	844	15.4	Trace	3.91	--	--	--
In shell	5.3	50	1,468	32.7	149.6	25.0	422	7.7	Trace	1.96	--	--	--
Cashew nuts, roasted or cooked	3.6	0	2,622	84.0	218.8	122.6	209	22.7	--	2.86	.86	9.5	--
Chickpeas or garbanzos, dry, whole seed, raw.	10.6	0	1,631	94.4	21.3	276.5	418	32.2	Trace	2.50	.79	6.9	(8)
Coconut:													
Fresh; refuse, shell and milk	46.9	47	865	8.2	83.6	33.7	51	4.8	0	.23	.02	.6	5
Dried, shredded (sweetened)	3.3	0	2,525	16.3	177.5	241.5	195	16.3	0	Trace	Trace	Trace	(0)
Cowpeas, mature seeds, dry	10.6	0	1,553	104.0	6.4	279.7	350	29.5	140	4.18	.72	10.1	8
Garbanzos. See Chickpeas.													
Lentils, dry:													
Whole (entire seeds)	11.2	0	1,531	113.5	4.5	270.1	268	33.6	2,580	2.53	1.11	10.2	25
Split (without seed coat)	12.2	0	1,539	109.0	5.4	274.2	154	33.6	2,580	2.53	1.11	10.2	25
Nuts (unshelled), assorted or mixed	4.	52	1,430	31.	142.	33.	284	6.1	70	1.25	.40	3.0	4

Food and description	Water content of edible portion	Refuse in food as purchased	Nutrients in edible portion of 1 pound of food as purchased										
			Food energy	Protein	Fat	Total carbohydrate	Calcium	Iron	Vitamin A value	Thiamine	Riboflavin	Niacin value	Ascorbic acid
	Pct.	Pct.	Cal.	Gm.	Gm.	Gm.	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
LEAFY, GREEN, AND YELLOW VEGETABLES--													
Continued													
Beans, snap--Continued													
Green--Continued													
Canned--Continued													
Solids from total contents of can; refuse, 31 percent liquid.	92.5	31	64	4.1	0.6	13.7	105	4.9	1,460	0.10	0.16	1.2	16
Strained (infant food)	92.6	0	99	8.2	.5	20.9	150	2.7	2,220	.13	.31	1.5	23
Frozen	88.9	0	159	10.9	.9	35.0	295	5.0	2,040	.32	.45	2.7	50
Wax or yellow:													
Raw; refuse, ends	88.9	10	143	9.8	.8	31.5	266	4.5	600	.33	.45	2.1	79
Canned:													
Total contents of can	93.5	0	83	4.5	.5	19.1	123	6.4	440	.15	.19	1.3	18
Drained solids, 1 pound, E.P. 1/ ..	92.5	0	99	6.4	.9	21.3	163	7.7	540	.16	.25	1.8	25
Solids from total contents of can; refuse, 31 percent liquid.	92.5	31	64	4.1	.6	13.7	105	4.9	350	.10	.16	1.2	16
Frozen	88.9	0	159	10.9	.9	35.0	295	5.0	480	.32	.45	2.7	50
Beet greens, common, raw; refuse, inedible leaves and stems.	90.4	25	93	6.8	1.0	19.0	2/ 401	10.9	22,700	.29	.61	1.5	115
Broccoli:													
Raw; refuse, leaves and tough stalks ..	89.9	39	82	9.1	.6	15.2	360	3.6	9,690	.27	.58	3.1	327
Frozen	92.2	0	105	11.4	.9	19.5	454	4.5	10,580	.32	.54	4.1	340
Brussels sprouts:													
Raw; refuse, outer leaves	84.9	23	164	15.4	1.8	31.2	119	4.6	1,390	.27	.58	2.4	328
Frozen	84.9	0	212	20.0	2.3	40.4	154	5.9	1,540	.23	.64	2.7	286
Cabbage:													
Raw; refuse, outer leaves and core	92.4	27	80	4.6	.7	17.5	152	1.7	270	.20	.17	1.0	165
Dehydrated (MIL-C-826, 7-27-49)	4.	0	1,407	65.4	8.6	329.2	1,789	22.2	2,470	2.41	1.71	13.3	989
Cabbage, celery or chinese, raw; refuse, outer leaves.	95.4	28	46	3.9	1.0	7.8	141	2.9	860	.10	.12	1.5	101
Carrots:													
Raw:													
With tops; refuse, tops and scrapings	88.2	37	119	3.4	.9	26.6	112	2.3	34,320	.16	.16	1.7	17
Without tops; refuse, scrapings	88.2	12	166	4.8	1.2	37.2	156	3.2	48,000	.22	.22	2.4	24

Canned:

Total contents of can
 Drained solids, 1 pound, E.P. 1/
 Solids from total contents of can;
 refuse, 31 percent liquid.

Strained (infant food)
 Dehydrated (MIL-C-839, 7-28-49)
 Carrots and peas, frozen

Chard, raw:

Leaves and stalks; refuse, inedible
 leaves and trimmings.

Leaves only
 Coleslaw
 Collards, raw; refuse, tough stalks and
 some leaves.

Cress, garden, raw; refuse, stalks and
 outer leaves.

Cress, water, leaves and stems, raw
 Dandelion greens, raw
 Endive, raw; refuse, stalks and outer
 leaves.

Escarole, raw. See Endive.

Kale:

Raw:

Untrimmed; refuse, stalks, outer
 leaves, and midribs.

Trimmed; no refuse
 Frozen

Lettuce, raw:

Headed; refuse, stalks and outer leaves
 All other; refuse, outer leaves
 Mustard greens, raw; refuse, stalks and
 lower leaves.

Okra, raw; refuse, stem ends
 Parsley, common, raw
 Peas, green immature:

Raw:

In pod; refuse, shells
 Shelled

92.2	0	128	2.3	1.8	27.7	100	2.7	54,480	.10	.10	1.5	10
91.5	0	138	2.7	2.3	29.1	118	2.7	79,750	.10	.10	1.4	12
91.5	31	95	1.9	1.5	20.0	81	1.9	54,980	.07	.07	.9	8
92.0	0	121	5.0	.5	26.8	114	2.7	40,580	.10	.13	2.4	17
4.	0	1,578	18.6	6.4	383.6	1,117	10.4	521,300	1.33	1.36	13.7	55
84.2	0	265	15.4	1.4	50.8	127	5.4	28,760	.91	.36	5.4	54
91.8	14	82	5.5	.8	17.2	2/ 410	9.8	10,920	.22	.28	1.7	148
91.	0	122	11.8	1.8	21.8	2/ 477	11.4	39,580	.26	.81	2.0	173
83.6	0	388	5.9	27.7	35.0	177	1.8	300	.22	.20	1.1	188
86.6	55	82	8.0	1.2	14.7	598	3.3	14,020	.22	.56	(4.1)	203
87.2	37	117	12.0	4.0	15.2	603	(8.3)	8,490	.31	.47	2.9	250
93.6	0	84	7.7	1.4	15.0	885	9.1	21,450	.37	.71	3.6	350
85.8	0	200	12.3	3.2	40.0	849	14.1	61,970	.85	.65	(3.8)	163
93.3	48	47	3.8	.5	9.4	186	4.0	7,070	.16	.27	.9	26
86.6	36	117	11.3	1.7	21.0	655	6.4	21,950	.30	.76	5.8	395
86.6	0	182	17.7	2.7	32.7	1,022	10.0	34,230	.46	1.19	9.1	522
86.6	0	182	17.7	2.7	32.7	1,022	10.0	31,780	.36	1.00	7.7	213
94.8	31	47	3.8	.6	9.1	69	1.6	1,710	.14	.26	.6	24
94.8	31	47	3.8	.6	9.1	194	3.4	5,060	.14	.26	.6	57
92.2	27	74	7.6	1.0	13.2	728	9.6	21,370	.31	.68	2.8	338
89.8	12	130	7.2	.8	29.6	328	2.8	2,950	.31	.30	4.2	121
83.9	0	225	16.8	4.5	40.9	2/ 876	19.5	37,360	.49	1.25	6.5	877
74.3	55	201	13.7	.8	36.1	45	3.9	1,390	.69	.33	5.5	54
74.3	0	448	30.4	1.8	80.4	100	8.6	3,100	1.53	.73	12.2	119

1/ Not on as purchased basis.

2/ Calcium may not be available because of presence of oxalic acid.

Food and description	Water content of edible portion	Refuse in food as purchased	Nutrients in edible portion of 1 pound of food as purchased										
			Food energy	Protein	Fat	Total carbohydrate	Calcium	Iron	Vitamin A value	Thiamine	Riboflavin	Niacin value	Ascorbic acid
	Pct.	Pct.	Cal.	Gm.	Gm.	Gm.	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
LEAFY, GREEN, AND YELLOW VEGETABLES--													
Continued													
Peas, green immature--Continued													
Canned:													
Total contents of can	82.3	0	307	15.4	1.8	58.6	114	8.2	2,470	0.51	0.28	4.7	39
Drained solids, 1 pound, E.P. 1/	76.7	0	411	20.4	2.7	78.1	145	9.5	3,030	.54	.30	4.5	42
Solids from total contents of can; refuse, 31 percent liquid.	76.7	31	284	14.1	1.9	53.8	100	6.6	2,090	.38	.20	3.1	29
Strained (infant food)													
Frozen	86.9	0	222	18.6	1.4	35.9	73	6.4	2,860	.41	.34	5.2	39
Peppers, green, raw; refuse, stem ends, seeds, and cores.	80.3	0	340	25.2	1.4	58.6	77	6.8	3,040	1.50	.50	8.6	82
Pimientos, canned	92.4	16	95	4.6	.8	21.7	42	1.5	2,410	.14	.25	1.4	457
Pumpkin:													
Raw; refuse, rind and cavity contents..	92.4	0	123	4.1	2.3	26.3	32	6.8	10,440	.11	.30	1.7	430
Canned	90.5	31	96	3.8	.6	22.8	66	2.5	(10,640)	(.15)	(.24)	(1.8)	26
Spinach:													
Raw:	90.2	0	151	4.5	1.4	35.9	(91)	(3.2)	15,440	.07	.28	2.5	--
Untrimmed; refuse, main stalk and outer leaves.	92.7	18	73	8.6	1.1	11.9	2/ 301	11.2	35,040	.41	.76	2.2	219
Trimmed	92.7	0	89	10.4	1.4	14.5	2/ 368	13.6	42,760	.50	.93	2.7	267
Canned:													
Total contents of can	92.3	0	89	10.4	1.8	13.6	2/ 408	7.3	30,830	.09	.45	1.5	66
Drained solids, 1 pound, E.P. 1/	90.8	0	115	14.1	2.7	16.3	2/ 563	9.1	34,650	.10	.54	1.8	65
Solids from total contents of can; refuse, 39 percent liquid.	90.8	39	71	8.6	1.7	10.0	2/ 343	5.5	21,140	.06	.33	1.1	40
Strained (infant food)													
Frozen	93.6	0	78	8.6	1.8	11.8	2/ 350	6.4	19,070	.09	.52	1.2	34
Squash, summer:	92.7	0	89	10.4	1.4	14.5	2/ 368	13.6	30,960	.32	.77	2.3	173
Raw; refuse, stem end	95.0	3	71	2.6	.4	17.2	66	1.8	1,140	.24	.41	3.4	75
Frozen	95.0	0	74	2.7	.5	17.7	68	1.8	1,000	.18	.36	3.2	50
Squash, winter:													
Raw; refuse, rind, and contents of cavity.	88.6	26	126	5.0	1.0	29.6	64	2.0	16,640	.15	.39	1.6	28
Canned, strained (infant food)	91.0	0	128	5.0	.9	30.4	141	1.8	8,910	.09	.25	(1.8)	19
Frozen	88.6	0	171	6.8	1.4	40.0	86	2.7	19,110	.18	.45	1.8	23

Turnip greens:

Raw:

Trimmed	0	135	13.2	1.8	24.5	1,176	10.9	43,330	.39	2.11	3.5	619
Untrimmed; refuse, discarded leaves..	16	113	11.0	1.5	20.6	987	9.1	36,370	.33	1.77	2.9	520
Canned, total contents of can	0	80	6.8	1.4	14.5	454	7.3	19,980	.07	.41	2.6	89

Water cress. See Cress, water.

TOMATOES AND TOMATO PRODUCTS:

Tonatoes:

Raw; refuse, skin, stem end, and inedible flesh.	12	81	4.0	1.2	16.0	44	2.4	4,380	.22	.17	2.0	93
Canned or cooked	0	86	4.5	.9	17.7	(50)	(2.7)	4,770	.25	.15	3.2	75
Tomato juice, canned	0	93	4.5	.9	19.5	(32)	(1.8)	4,770	.23	.13	3.5	72
Tomato catsup or chili sauce	0	446	9.1	1.8	111.2	54	3.6	(8,540)	.41	.32	10.2	51
Tomato flakes	0	1,544	49.0	15.0	348.2	540	29.5	16,880	2.96	1.97	29.6	518
Tomato paste, canned	0	359	18.6	(3.6)	74.0	109	5.4	17,490	.89	.54	13.6	229
(C.Q.D. No. 143, 7-20-43).												
Tomato puree, canned	0	165	8.2	2.3	32.7	(50)	(5.0)	8,540	.40	.32	8.1	126
Tomato soup. See Miscellaneous, soups, canned.												

CITRUS FRUITS:

Grapefruit:

Raw; refuse, rind and seeds	34	119	1.5	.6	30.3	66	.6	20	.11	.06	.6	121
Canned in sirup, total contents of can.	0	329	2.7	.9	86.7	59	1.4	40	.13	.08	1.0	134
Grapefruit juice:												
Fresh	0	162	2.3	.5	41.8	36	1.4	40	.17	.09	1.0	183
Canned:												
Unsweetened	0	172	2.3	.5	44.5	36	1.4	40	.14	.08	.8	158
Sweetened	0	235	2.3	.4	62.2	36	1.4	40	.14	.08	.8	158
Grapefruit juice concentrate, frozen (13.5 fluid ounces).	0	667	8.6	1.8	173.0	141	5.4	140	.53	.30	3.2	612

Grapefruit-orange juice blend:

Canned:												
Unsweetened	0	183	2.7	.5	47.2	41	1.4	200	.21	.08	.9	171
Sweetened	0	239	2.3	.5	63.1	41	1.4	200	.21	.08	.9	171
Frozen concentrate (13.5 fluid ounces).	0	668	10.0	1.8	172.1	150	5.0	730	.76	.28	3.3	622
Lemons; refuse, rind and seeds	38	88	2.5	1.7	24.4	112	1.7	0	.13	.01	.4	139
Lemon juice, canned:												
Unsweetened	0	108	1.8	.9	35.0	64	.5	0	.20	.02	.6	191
Concentrate (13.5 fluid ounces)	0	528	9.1	4.5	170.2	309	2.3	(0)	1.00	.11	3.1	1,044

1/ Not on as purchased basis.

2/ Calcium may not be available because of presence of oxalic acid.

Food and description	Water content of edible portion	Refuse in food as purchased	Nutrients in edible portion of 1 pound of food as purchased										
			Food energy	Protein	Fat	Total carbohydrate	Calcium	Iron	Vitamin A	Thiamine	Riboflavin	Niacin value	Ascorbic acid
	Pct.	Pct.	Cal.	Gm.	Gm.	Gm.	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
CITRUS FRUITS--Continued													
Lemon juice powder, synthetic, canned (MIL-L-1066A, 10-14-49):													
Type I, with ascorbic acid	1.7	0	1,472	1.8	0.9	440.8	177	10.9	0	0.16	0.04	0.7	3,840
Type II, without ascorbic acid	1.7	0	1,472	1.8	.9	440.8	177	10.9	0	.16	.04	.7	200
Limes; refuse, rind and seeds	86.0	24	126	2.8	.3	42.4	(138)	(2.1)	0	(.16)	(.02)	(.5)	94
Oranges; refuse, rind and seeds	87.2	28	147	2.9	.7	36.6	108	1.3	(620)	.25	.09	.8	162
Orange juice:													
Fresh	87.5	0	199	3.6	.9	49.9	86	.9	(850)	.35	.12	1.1	224
Canned:													
Unsweetened	87.5	0	201	3.6	.9	50.4	45	1.4	(440)	.32	.08	1.0	191
Sweetened	84.8	0	244	2.7	.9	63.1	45	1.4	(440)	.32	.08	1.0	191
Orange juice concentrate:													
Canned (12 fluid ounces)	35.	0	1,039	19.1	3.2	263.3	277	7.3	(2,320)	1.68	.38	5.2	1,003
Frozen (13.5 fluid ounces)	58.	0	674	12.3	3.2	168.4	154	4.5	(1,500)	1.09	.25	3.4	641
Orange juice powder, synthetic, canned (MIL-O-1026A, 10-14-49):													
Type I, with ascorbic acid	1.7	0	1,561	5.4	1.8	434.0	295	15.9	1,130	.50	.23	1.7	3,840
Type II, without ascorbic acid	1.7	0	1,561	5.4	1.8	434.0	1,158	15.9	1,130	.50	.23	1.7	318
Tangerines (including other Mandarin type oranges).	87.3	29	144	2.6	1.0	35.1	(106)	(1.3)	(1,360)	.22	(.08)	(.8)	99
Tangerine juice, unsweetened:													
Fresh	89.2	0	176	4.1	1.4	41.8	86	(.9)	(1,920)	.31	(.12)	1.1	139
Canned	89.2	0	176	4.1	1.4	41.8	86	.9	(1,920)	(.28)	(.12)	(1.1)	(118)
POTATOES AND SWEET POTATOES:													
Potatoes:													
Raw; refuse, parings	77.8	16	318	7.6	.4	72.8	42	2.7	70	.40	.15	4.4	1/ 64
Canned:													
Total contents of can	84.6	0	262	7.7	.1	59.5	36	2.3	60	.26	.13	3.8	40
Drained solids, 1 pound, E.P. 2/	77.8	0	378	9.1	.5	86.7	50	3.2	80	.36	.15	4.2	57
Solids from total contents of can; refuse, 28 percent liquid.	77.8	28	272	6.5	.3	62.5	36	2.3	60	.26	.10	3.0	41
Dehydrated (JAN-F-1073, 5-13-49)	7.	0	1,619	32.2	3.2	373.2	114	18.2	180	1.38	.48	20.4	102
Potato chips	3.1	0	2,469	30.4	168.4	222.9	(136)	(8.6)	(230)	(.82)	(.50)	(14.5)	50
Potato flour	7.	0	1,619	32.2	3.2	373.2	114	18.2	180	1.38	.48	20.4	102

Food and description	Water content of edible portion	Refuse in food as purchased	Nutrients in edible portion of 1 pound of food as purchased										
			Food energy	Protein	Fat	Total carbohydrate	Calcium	Iron	Vitamin A value	Thiamine	Riboflavin	Niacin value	Ascorbic acid
	Pct.	Pct.	Cal.	Gm.	Gm.	Gm.	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	
OTHER VEGETABLES--Continued													
Celery, bleached, raw; refuse, leaves and trimmings.	93.7	37	52	3.7	0.6	10.6	143	1.4	0	0.15	0.11	1.2	20
Corn, sweet, white or yellow:													
Raw:													
With husks; refuse, husks and cobs ..	73.9	62	160	6.4	2.1	35.5	16	.9	1/ 680	.26	.20	2.9	20
Without husks; refuse, cobs	73.9	29	297	11.9	3.9	66.0	29	1.6	1/ 1,260	.48	.37	5.4	30
Canned:													
Total contents of can	80.5	0	302	9.1	2.3	73.1	18	2.3	1/ 920	.12	.23	4.2	24
Drained solids, 1 pound, E.P. 2/	75.5	0	384	12.3	3.2	91.7	23	2.7	1/ 1,060	.15	.29	4.1	24
Solids from total contents of can; refuse, 32 percent liquid.	75.5	32	262	8.3	2.2	62.4	15	1.9	1/ 720	.11	.19	2.8	16
Frozen:													
Kernels	78.0	0	350	14.5	4.1	78.5	36	1.8	1/ 500	.54	.45	6.3	36
Corn on cob; refuse, cobs	78.0	(29)	248	10.3	2.9	55.7	26	1.3	1/ 350	.39	.32	4.4	26
Cowpeas, raw:													
Immature seeds	65.9	0	590	42.7	2.7	103.1	168	11.4	1,640	1.77	.40	4.1	139
Young green pods (including asparagus beans); refuse, ends and strings.	86.2	9	180	14.0	1.2	38.0	219	4.5	6,880	.65	.43	4.7	139
Cucumbers, raw; refuse, parings	96.1	30	39	2.2	.3	8.6	32	1.0	0	.11	.14	.7	27
Eggplant, raw; refuse, calyx and parings.	92.7	13	95	4.3	.8	21.7	59	1.6	100	.18	.20	2.5	19
Kohlrabi, raw; refuse, tops and parings..	90.1	46	73	5.1	.2	16.4	113	1.5	Trace	.14	.12	.6	149
Mung bean sprouts, raw	92.4	0	106	13.2	.9	18.6	132	3.6	60	.32	.42	2.3	68
Mushrooms:													
Raw; refuse, skins	91.1	9	66	9.9	1.2	16.5	37	4.1	0	.41	1.83	20.4	21
Canned, total contents of can	93.0	0	51	6.4	.9	16.8	(32)	(3.6)	0	.07	1.12	8.9	--
Onions, mature:													
Raw; refuse, skins and rootlets	87.5	6	193	6.0	.9	44.0	137	2.1	210	.14	.15	.9	38
Dehydrated, Type I, flaked (MIL-C-3028, 8-8-49).	4.	0	1,574	49.0	5.0	364.1	763	15.4	570	1.13	.80	6.2	163
Onions, young green; refuse, tops, skins, and rootlets.	87.6	59	84	1.9	.4	19.7	251	1.7	(90)	(.06)	(.07)	(.4)	44
Parsnips, raw; refuse, scrapings	78.6	22	277	5.3	1.8	64.4	202	2.5	0	.27	.42	.7	63
Radishes, raw; refuse, tops and rootlets.	93.6	51	45	2.7	.2	9.3	82	2.2	70	.07	.06	.7	54
Rutabagas, raw; refuse, parings	89.1	15	147	4.2	.4	34.4	212	1.5	1,280	.29	.30	3.6	140

Sauerkraut, canned, total contents of can	93.2	0	75	5.0	.9	15.4	163	(2.3)	150	.15	.29	.5	74
Soybean curd	85.1	0	321	31.8	18.6	13.6	454	6.8	--	.25	.23	1.6	(0)
Soybean sprouts, raw	86.3	0	208	28.1	6.4	24.1	218	4.5	790	1.03	.89	3.9	61
Succotash, frozen	79.1	0	341	17.3	3.2	70.8	154	4.5	1,010	.45	.41	4.5	50
Turnips, raw:													
Refuse, tops and parings	90.9	34	96	3.3	.6	21.3	120	1.5	20	.15	.20	1.4	86
Refuse, parings	90.9	13	126	4.3	.8	28.0	158	2.0	20	.19	.26	1.8	113
Vegetables, mixed, canned, strained (infant food).	90.5	0	134	7.3	.5	31.3	136	4.5	3/	.12	.13	1.7	12
FRUITS, OTHER THAN CITRUS:													
Apples:													
Raw; refuse, skins and cores	84.1	12	232	1.2	1.6	59.6	24	1.2	360	.16	.12	.7	18
Canned. See Applesauce.													
Dehydrated (MIL-A-1035A, 9-23-49)	2.5	0	1,617	8.2	11.4	415.0	114	8.2	(0)	.33	.47	5.4	53
Dried	23.	0	1,256	6.4	4.5	332.3	86	6.4	(0)	.43	.43	4.4	55
Apple juice, fresh or canned (JAN-A-802, 6-28-49).	85.9	0	227	.5	(0)	62.7	27	2.3	160	.09	.14	Trace	5
Apples and apricots, canned, strained (infant food).	82.3	0	287	1.8	1.4	74.9	50	4.5	4,850	.09	.09	.9	9
Applesauce, canned:													
Unsweetened	88.4	0	189	.9	.9	49.5	18	1.8	140	.09	.05	.2	5
Sweetened	79.8	0	329	.9	.5	89.4	18	1.8	150	.09	.05	.2	5
Strained (infant food)	83.1	0	277	2.3	.9	72.6	23	1.8	370	.05	.07	.8	9
Apricots:													
Raw; refuse, pits	85.4	6	216	4.3	.4	55.1	68	2.1	11,930	.12	.22	3.5	29
Canned, total contents of can:													
Water pack	90.9	0	144	2.3	.5	36.8	45	1.4	6,140	.07	.10	1.5	18
Sirup pack	77.3	0	363	2.7	.5	97.2	45	1.4	6,140	.07	.10	1.5	18
Strained (infant food)	82.6	0	279	4.5	1.8	69.0	91	(5.0)	(7,720)	(.09)	(.09)	(.9)	(14)
Dehydrated or dried (MIL-A-1380, 9-12-49)	24.	0	1,188	23.6	1.8	303.7	390	22.2	33,730	.06	.71	14.9	57
Dehydrated, powdered (MIL-R-2406, 8-24-50)	1.5	0	1,540	30.4	2.3	394.1	504	29.1	--	--	--	--	--
Frozen	77.8	0	372	3.2	.5	95.3	50	1.8	7,540	.09	.14	2.3	18
Avocados, raw 4/; refuse, seeds and skins	65.4	25	833	5.8	89.8	17.3	34	2.0	970	.21	.46	3.9	54
Bananas, raw; refuse, skins	74.8	33	269	3.6	.6	69.9	24	1.8	1,300	.13	.14	2.2	29
Bananas, baking. See Plantain.													

1/ Vitamin A based on yellow corn; white corn contains only a trace.

2/ Not on as purchased basis.

3/ Vitamin A value ranges from 4,400 to 24,240 I.U. per pound.

4/ Data on proximate constituents apply to Fuerte variety.

Food and description	Water content of edible portion	Refuse in food as purchased	Nutrients in edible portion of 1 pound of food as purchased						Thiamine value	Riboflavin value	Niacin value	Ascorbic acid
			Food energy	Protein	Fat	Total carbohydrate	Calcium	Iron	Vitamin A value			
	Pct.	Pct.	Cal.	Gm.	Gm.	Gm.	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.
FRUITS, OTHER THAN CITRUS--Continued												
Blackberries:												
Raw	84.8	0	260	5.4	4.5	56.8	145	4.1	890	0.16	1.6	94
Canned, total contents of can:												
Water pack	88.7	0	194	4.1	3.2	42.7	82	(3.2)	830	.06	1.0	28
Sirup pack	76.0	0	391	3.2	.9	103.5	82	(3.2)	830	.06	1.0	28
Blueberries:												
Raw	83.4	0	279	2.7	2.7	68.6	73	3.6	1,290	(.11)	(1.2)	74
Canned, total contents of can:												
Water pack	90.	0	168	1.8	1.8	40.9	50	(2.3)	180	.06	.9	60
Sirup pack	73.	0	446	1.8	1.8	118.0	50	(2.3)	180	.06	.9	60
Frozen, without sugar	83.4	0	279	2.7	2.7	68.6	73	3.6	1,090	(.08)	(1.2)	64
Cantaloups, raw; refuse, rind and cavity contents.	94.0	53	43	1.3	.4	9.8	36	.9	1/ 7,290	.10	1.1	69
Cherries, sour, sweet, and hybrid, raw; refuse, pits.	83.0	6	261	4.7	2.1	63.2	77	1.7	2,830	.21	1.8	36
Cherries, red, sour, pitted, canned	86.6	0	218	3.6	1.4	54.0	50	(1.4)	3,280	.13	.8	25
Cranberries:												
Raw	87.4	0	218	1.8	3.2	51.3	64	2.7	200	(.14)	.6	54
Dehydrated (MIL-C-827, 7-27-49, Amend. 1, 10-21-49).	4.9	0	1,672	12.7	30.0	382.7	372	15.4	(1,370)	.86	4.1	155
Cranberry sauce, sweetened, canned or cooked.	48.1	0	900	.5	1.4	233.4	(36)	(1.4)	(140)	(.09)	(.5)	8
Currants, red, raw	84.4	3	241	5.3	.9	59.8	158	4.0	530	.16	--	160
Dates, "fresh" and dried:												
With pits	20.	13	1,121	8.7	2.4	297.8	284	8.3	220	.35	8.6	(0)
Pitted	20.	0	1,288	10.0	2.7	342.3	327	9.5	250	.40	9.9	(0)
Dates, dehydrated, powdered (MIL-R-2406, 8-24-50).	1.5	0	1,587	12.3	3.2	421.8	404	11.8	--	--	--	--
Figs:												
Raw	78.0	0	357	6.4	1.8	89.0	245	2.7	360	.25	2.5	7
Canned, sirup pack, total contents of can.	68.5	0	514	3.6	1.4	136.2	159	1.8	240	.13	1.6	2
Dried	24.	0	1,224	18.2	5.4	310.5	844	13.6	370	.71	7.8	(0)

Fruit cocktail, canned, total contents of can.	80.6	0	317	1.8	.9	84.4	41	1.8	730	.05	.05	1.6	9
Gooseberries, raw	88.9	0	178	3.6	.9	44.0	100	2.3	1,330	--	--	--	149
Grapes, raw:													
American type (slip skin) as Concord, Delaware, Niagara, and Scuppernon; refuse, skins and seeds.	81.9	22	248	5.0	5.0	52.7	60	2.1	270	.21	.13	.8	14
European type (adherent skin) as Malaga, Muscat, Sultanina (Thompson Seedless), and Flame; refuse, seeds and stems.	81.6	3	292	3.5	1.8	73.5	75	2.6	330	.26	.17	1.0	17
Grape juice, bottled, commercial	81.	0	303	1.8	.0	82.6	45	1.4	--	.17	.21	(1.0)	Trace
Grape beverage crystals, synthetic (MIL-G-1067A, 9-8-49):													
Type I, without ascorbic acid .....	.2	0	1,140	.5	2.3	447.6	599	.5	--	--	--	--	--
Type II, with ascorbic acid .....	.2	0	1,140	.5	2.3	447.6	599	.5	--	--	--	--	9,080
Type III, with ascorbic acid and diluted with dextrose.	.1	0	1,533	Trace	.5	452.2	154	.1	--	--	--	--	3,242
Guavas, common, raw; refuse, skins	80.6	13	276	4.0	2.4	67.5	118	2.8	990	.26	.17	4.5	1,194
Honeydew melon, raw; refuse, rind and cavity contents.	90.5	37	92	1.4	0.	24.3	(49)	(1.1)	120	.13	.08	.6	65
Loganberries, raw	82.9	0	283	4.5	2.7	68.1	159	5.4	(890)	(.14)	(.30)	(1.3)	108
Mangos, raw; refuse, seeds and skin	81.4	34	198	2.1	.6	51.6	27	.6	19,040	.19	.17	2.8	124
Papayas, raw; refuse, rind and seeds	88.7	32	120	1.9	.3	30.9	62	.9	5,410	.11	.12	.9	173
Peaches:													
Raw; refuse, pits and skins	86.9	12	183	2.0	.4	48.0	32	2.4	3,530	.08	.19	3.6	31
Canned, total contents of can:													
Water pack	92.3	0	123	2.3	.5	30.9	23	1.8	2,060	.03	.09	3.1	19
Sirup pack	80.9	0	308	1.8	.5	82.6	23	1.8	2,060	.03	.09	3.1	19
Strained (infant food)	83.5	0	271	3.6	1.4	68.6	32	4.1	2,860	.10	.09	2.6	12
Dehydrated or dried (MIL-P-1379, 9-12-49)	24.	0	1,203	13.6	2.7	315.1	200	31.3	14,760	.04	.89	24.5	86
Dehydrated, powdered (MIL-R-2406, 8-24-50)	1.5	0	1,559	17.7	3.6	408.1	259	40.4	--	--	--	--	--
Frozen	78.9	0	355	1.8	.5	91.7	27	1.8	2,360	.05	.14	2.3	18
Pears:													
Raw; refuse, skins and cores	82.7	17	236	2.6	1.5	59.6	49	1.1	90	.08	.16	.5	15
Canned, total contents of can:													
Water pack	91.2	0	143	1.4	.5	37.2	36	.9	20	.04	.08	.6	8
Sirup pack	81.1	0	308	.9	.5	83.5	36	.9	20	.04	.08	.6	8
Strained (infant food)	85.7	0	232	3.2	.9	59.5	50	(.9)	200	.05	.10	.9	5
Persimmons, Japanese or Keki, raw:													
Seedless kind	78.2	3	344	3.5	1.8	88.0	26	1.3	11,900	.22	.20	Trace	48
Kinds with seeds	78.2	24	270	2.8	1.4	69.0	21	1.0	9,330	.17	.16	Trace	38

1/ Vitamin A value based on deeply colored varieties.

Food and description	Water content of edible portion	Refuse in food as purchased	Nutrients in edible portion of 1 pound of food as purchased										
			Food energy	Protein	Fat	Total carbohydrate	Calcium	Iron	Vitamin A	Thiamine	Riboflavin	Niacin	Ascorbic acid
	Pct.	Pct.	Cal.	Gm.	Gm.	Gm.	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
FRUITS, OTHER THAN CITRUS--Continued													
Pineapple:													
Raw; refuse, crown, core, and parings...	85.3	47	126	1.0	0.5	33.0	39	0.7	310	0.20	0.06	0.5	57
Canned, sirup pack, total contents of can.	78.0	0	355	1.8	.5	95.8	132	2.7	360	.35	.07	.8	41
Frozen	76.8	0	388	1.8	.9	100.8	64	1.4	450	.27	.09	.9	86
Pineapple juice, canned	86.2	0	221	1.4	.5	59.0	68	2.3	360	.24	.07	.8	41
Plantain or baking banana, raw; refuse, skins.	66.4	23	418	3.8	1.4	109.2	24	2.4	1/	.21	.14	2.1	49
Plums (all, excluding prunes), raw:													
Refuse, pits only	85.7	5	218	3.0	.9	55.6	73	2.2	1,510	.28	.18	2.1	20
Refuse, pits and skins	85.7	15	195	2.7	.8	49.8	66	1.9	1,350	.25	.16	1.9	18
Plums (Italian prunes), canned:													
Sirup pack, total contents of can; refuse, pits.	78.6	4	329	1.7	.4	88.9	35	4.8	990	.12	.11	1.6	5
Prunes, canned, strained (infant food) ..	72.6	0	439	5.0	.9	115.3	118	6.8	3,340	.14	.21	2.5	14
Prunes, dehydrated or dried; refuse, pits (JAN-P-1105, 6-3-49).	20.	15	1,088	9.3	2.3	288.3	220	15.8	7,680	.40	.67	6.9	12
Prunes, dehydrated, powdered	1.5	0	1,580	13.6	3.6	417.7	318	23.2	--	--	--	--	--
(MIL-R-2406, 8-24-50).													
Prune juice, canned	80.	0	321	1.8	0.	87.6	(114)	(8.2)	--	(.14)	(.36)	1.9	(5)
Raisins, unsulfured, dried	18.	0	1,313	11.4	2.3	348.7	381	16.3	240	.75	.40	2.4	Trace
Raspberries:													
Black, raw	80.6	0	341	6.8	7.3	71.3	182	4.1	0	.11	(.30)	(1.3)	(109)
Red:													
Raw	84.1	0	259	5.4	1.8	62.7	182	4.1	500	.11	(.30)	(1.3)	109
Frozen	73.9	0	445	3.6	1.4	112.1	127	2.7	360	.05	(.18)	(.9)	73
Rhubarb:													
Raw; refuse, leaves	94.9	32	50	1.5	.3	11.7	2/	158	100	.03	--	.3	28
Stems, cooked, sugar added	62.9	0	639	1.8	.5	163.4	2/	186	110	.03	--	.3	28
Canned in sirup. See Cooked.													
Frozen	78.9	0	358	1.8	.5	90.8	2/	191	110	.03	--	.4	27
Strawberries:													
Raw; refuse, stems and caps	89.9	4	160	3.5	2.2	36.2	122	3.5	250	.13	.29	1.3	261
Frozen	72.0	0	483	2.7	1.8	120.8	100	2.7	180	.09	.23	.9	186
Watermelons; refuse, rinds and seeds	92.1	54	58	1.0	.4	14.4	15	.4	1,240	.10	.11	.4	13

BEVERAGES:

Bear (average 4 percent alcohol)	90.2	0	3/	2.7	.0	20.0	18	.0	(0)	Trace	.12	.7	(0)
Beverages, carbonated:	91.	0	158	--	--	41.	--	--	--	--	--	--	--
Ginger ale	88.	0	211	--	--	54.	--	--	--	--	--	--	--
Other, including kola type													
Cocoa, beverage, powder													
(MIL-C-3031, 8-30-49):													
Type I, with ascorbic acid	4.5	0	1,602	48.6	22.7	337.8	1,648	10.0	70	.50	2.63	3.2	241
Type II, without ascorbic acid	4.5	0	1,602	48.6	22.7	337.8	1,648	10.0	70	.50	2.63	3.2	9
Coffee, soluble product, Type II (MIL-C-1019A, 12-19-49, Amend. 1, 2-28-50):													
Class A, without ascorbic acid	3.0	0	1,001	Trace	Trace	4/(272.)	763	10.9	0	Trace	1.41	100.3	0
Class B, with ascorbic acid	3.0	0	1,001	Trace	Trace	4/(272.)	763	10.9	0	Trace	1.41	100.3	1,362
Milk, malted, beverage. See Milk and Milk Products.													
Soybean milk (without added calcium and vitamins).	92.5	0	149	15.4	6.8	9.5	95	3.2	--	.41.	.19	1.2	(0)
Tea, soluble product													
(Q.M.C. Pur. Descr., 8-16-50):													
Type I, without ascorbic acid	4.3	0	1,034	Trace	Trace	4/(281.)	27	10.9	0	Trace	1.82	46.8	0
Type II, with ascorbic acid	4.3	0	1,034	Trace	Trace	4/(281.)	27	10.9	0	Trace	1.82	46.8	4,256
MISCELLANEOUS:													
Bouillon, Type III, powdered													
(MIL-B-1112A, 5-17-50).	3.5	0	--	89.4	5.4	--	--	--	--	--	--	--	--
Chocolate:													
Bitter or unsweetened	2.3	0	2,290	(25.0)	240.2	5/ 132.6	2/ 445	20.0	270	.21	1.09	4.5	(0)
Sweetened:													
Plain	1.4	0	2,145	(9.1)	135.3	284.7	2/ (286)	12.7	(150)	(.14)	(.70)	(2.9)	(0)
Milk. See Sugars, sirups, and other sweets, candy.													
Milk, with almonds. See Sugars, sirups, and other sweets, candy.													
Cocoa, breakfast, plain, dry powder	3.9	0	1,351	(36.3)	108.1	5/ 222.0	2/ 568	52.7	(120)	.55	1.74	10.4	(0)
Custard pudding, canned, strained (infant food).	75.2	0	489	13.6	12.3	83.1	418	1.4	1,000	.07	.56	.6	5

1/ The vitamin A values range from about 30 I.U. per pound of white fleshed plantains to 4,200 I.U. per pound of deeper yellow varieties.

2/ Calcium may not be available because of presence of oxalic acid.

3/ The value excluding energy derived from alcohol is 89 calories. If the energy from alcohol is considered available, the value is 215 calories.

4/ Total reducing sugars.

5/ Approximately one-third of this total amount of carbohydrate calculated by difference is starch and sugar. The remaining portion is made up of materials thought to be utilized only poorly, if at all, by the body.

Food and description	Water content of edible portion	Refuse in food as purchased	Nutrients in edible portion of 1 pound of food as purchased										
			Food energy	Protein	Fat	Total carbohydrate	Calcium	Iron	Vitamin A value	Thiamine	Riboflavin	Niacin value	Ascorbic acid
	Pct.	Pct.	Cal.	Gm.	Gm.	Gm.	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
MISCELLANEOUS--Continued													
Dessert powder, prepared. See Sugars, sirups, and other sweets.	13.0	0	1,520	388.6	0.5	0.	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Gelatin, dry, plain													
Olives, pickled:													
Green; refuse, pits	75.2	16	504	5.7	51.4	15.2	331	6.1	1,140	Trace	--	--	--
Ripe:													
Mission; refuse, pits	71.8	16	728	6.9	80.0	9.9	331	6.1	240	.02	.02	--	--
Other varieties (as escalano, manzanilla, and sevilano); refuse, pits.	79.8	16	488	4.6	51.4	11.8	331	6.1	240	.02	.02	--	--
Pickles:													
Dill, cucumber	93.2	0	49	3.2	.9	9.5	114	5.4	1,410	.03	.29	.2	29
Fresh, cucumber (as bread and butter pickles).	79.5	0	316	4.1	.9	77.2	145	8.2	820	.11	.19	.1	41
Sour, cucumber or mixed	95.1	0	49	2.3	.9	10.0	114	5.4	1,410	.03	.29	.2	29
Sweet, cucumber or mixed	70.5	0	488	3.6	1.8	120.0	73	5.9	510	(0)	.08	.1	32
Pudding, pineapple and rice, canned (ML-P-1438A, 5-31-50).	61.0	0	716	9.5	7.7	156.6	200	1.8	500	.23	.23	.5	18
Pudding, steamed, canned (ML-P-1499A, 6-30-50):													
Type I, plum	34.7	0	1,254	18.2	30.4	239.7	454	13.2	--	.45	.39	7.1	0
Type II, fig	34.6	0	1,334	18.6	44.0	229.3	681	(13.6)	600	.33	.48	6.5	0
Type III, date	35.7	0	1,315	16.8	47.7	217.9	311	13.6	2,490	.28	1.17	3.8	0
Type IV, fruit pudding	37.2	0	1,290	25.4	47.2	203.8	354	12.7	--	.05	.34	6.9	0
Type V, steamed fruit cake	27.8	0	1,477	18.6	49.9	253.3	326	12.3	--	.27	.34	9.0	0
Sherbet	68.1	0	558	6.8	.2	136.2	227	.1	0	.08	.35	.2	(0)
Soups, canned: 1/													
Bean:													
Condensed	64.7	0	700	31.3	18.6	107.1	340	10.0	--	.36	.36	3.2	--
Ready-to-serve	82.4	0	348	15.4	9.1	53.6	173	5.0	--	.18	.18	1.4	--
Beef:													
Condensed	83.2	0	362	21.8	12.3	40.4	54	1.4	--	--	--	--	--
Ready-to-serve	91.6	0	182	10.9	6.4	20.0	27	.9	--	--	--	--	--
Bouillon, broth, and consomme:													
Condensed	90.9	0	39	(9.1)	--	(0.)	9	4.1	0	0	.18	2.4	0
Ready-to-serve	95.	0	21	(5.)	--	(0.)	5	1.8	0	0	.09	1.2	0

Chicken:	87.2	0	273	12.3	8.6	35.9	68	1.4	--	.09	.50	5.4	--									
Condensed	93.6	0	137	6.4	4.5	17.3	36	.9	--	.05	.23	2.7	--									
Ready-to-serve	87.4	0	270	14.1	10.9	26.8	173	.9	1,040	.08	.44	1.9	3									
Strained (infant food)																						
Clam chowder:																						
Condensed	81.7	0	306	15.9	8.6	44.0	123	12.7	--	--	--	--	--									
Ready-to-serve	90.8	0	153	8.2	4.1	22.2	64	6.4	--	--	--	--	--									
Cream soup (asparagus, celery, or mushroom):																						
Condensed	82.5	0	406	10.0	23.6	43.1	236	1.4	730	.18	.77	.5	5									
Ready-to-serve	84.8	0	359	12.7	20.9	32.7	386	.9	360	.09	.36	.2	(0)									
Liver soup, strained (infant food)	86.8	0	247	19.1	4.1	32.2	73	8.6	21,530	.24	1.92	8.0	22									
Noodle, rice or barley:																						
Condensed	80.7	0	424	22.2	15.9	47.2	300	.9	90	.09	.18	2.5	0									
Ready-to-serve	90.4	0	213	10.9	8.2	23.6	150	.5	50	.05	.09	1.2	0									
Pea:																						
Condensed	72.4	0	520	23.6	7.3	92.6	118	5.4	(1,630)	.64	.27	4.5	14									
Ready-to-serve	86.2	0	259	11.8	3.6	46.3	59	2.7	(820)	.32	.14	2.3	9									
Tomato:																						
Condensed	81.4	0	335	8.2	8.2	66.3	95	3.2	(4,540)	.09	.36	2.7	32									
Ready-to-serve	90.7	0	167	4.1	4.1	33.1	45	1.8	(2,270)	.05	.18	1.4	18									
Vegetable:																						
Condensed	83.2	0	295	15.0	6.4	52.2	118	2.7	--	.18	.27	4.1	27									
Ready-to-serve	91.6	0	149	7.7	3.2	26.3	59	1.4	--	.09	.14	1.8	14									
Strained (infant food)	87.2	0	186	10.9	1.4	41.3	104	4.5	11,130	.32	.26	2.3	7									
Vegetable and lamb soup, strained (infant food).	87.7	0	229	10.9	5.4	34.5	91	2.7	11,780	.10	.23	4.2	7									
Soups, dehydrated:																						
Mix, with chicken (added thiamine) (Indiv. Frigid Trail Ration Pur. Descr., 8-8-50).	2.0	0	1,696	49.0	106.2	136.2	154	17.7	2,120	16.01	.06	2.7	(0)									
Noodles, with chicken (added thiamine) (MIL-S-1049A, 10-14-49).	5.2	0	1,768	55.8	43.1	281.5	118	12.3	1,290	5.47	.37	8.4	(0)									
Pre-cooked (Q.M.C. Pur. Descr., 8-10-50):																						
Type I, green pea (added thiamine) ..	3.5	0	1,788	101.2	48.1	250.2	132	20.4	1,460	6.41	1.10	12.3	(0)									
Type II, beans (added thiamine)	3.5	0	1,808	89.9	50.4	258.3	663	28.1	(0)	5.34	.91	9.1	(0)									
Soybean sauce	63.	0	208	25.9	5.9	40.9	558	25.9	0	--	--	--	0									
Vinegar	--	0	56	0.	--	(22.7)	32	2.3	--	--	--	--	--									
Yeast:																						
Compressed, baker's	70.9	0	388	(48.1)	1.8	59.0	114	22.2	(0)	2.05	9.38	128.0	(0)									
Dried, brewer's	7.0	0	1,239	(167.5)	7.3	169.8	481	82.6	(0)	43.99	24.74	164.3	(0)									

1/ All the ready-to-serve soups are calculated from equal weights of the condensed soup and water except cream soup which was based on equal weights of the condensed soup and milk.

APPENDIX

Notes on Special Foods or Food Groups

Meat, poultry, fish.--Much of the meat procured by the armed forces is selected, cut, boned, and frozen in accordance with specifications that cover each step. As a result, the composition may be considerably different from that of meat in regular civilian supplies. Where information permitted, data were included in the table for meat procured under specifications. For example, under the heading Beef, boneless, frozen (4-way) items are listed with figures from studies conducted by the Research and Development Branch of The Quartermaster Corps. Present specifications for frozen boneless beef call for four categories of boneless cuts: (1) Roasts or Steaks (dry heat)--that is, cuts for which cooking by dry heat methods such as broiling or roasting may be used; (2) Roasts or Steaks (moist heat)--that is, cuts for which cooking by moist heat methods such as pot roasting or making Swiss steak are recommended; (3) Diced beef cuts suitable for braising or stewing; (4) Ground beef--cuts to be made into patties or loaves.

Meat of medium fatness, unless otherwise specified, was used for each kind of animal as a basis for the data entered in the present tables. Data for the composition of thinner or fatter meat have been entered also for the wholesale carcass (or side) of each kind of animal.

Reliable average values on proximate composition of untrimmed wholesale cuts have long been available, but figures comparable in accuracy do not exist for average retail cuts that have had some fat and bone and sometimes small amounts of lean removed. Data in this table for retail cuts of lamb, pork, and veal are from wholesale cuts considered most suitable. For beef also, data are based on wholesale cuts but the figures have been adjusted to allow for a moderate amount of trimming in the case of cuts from which considerable fat and bone are customarily removed.

Because fat is a much more concentrated source of calories than lean meat, it is obvious that (1) trimming before and after the meat comes to the kitchen, (2) loss of fat during cooking, and (3) discarding fat as plate waste, would mean that the portion of meat eaten furnishes many fewer calories than the potential value of the original wholesale cut. However, data are not now available to correct for all three factors listed.

Mineral and vitamin analyses have not been reported for many fresh and cured meats, and the values shown in these tables were in most cases calculated by applying factors to the protein content as follows:

	Content per 100 grams of protein: 1/				
	Calcium	Iron	Thiamine	Riboflavin	Niacin
	Mg.	Mg.	Mg.	Mg.	Mg.
Beef, fresh	58	15	.43	.89	24.0
Lamb, fresh	58	15	.89	1.24	28.9
Pork, cured	58	15	4.13	1.11	23.4
Pork, fresh	58	15	4.86	1.17	26.0
Veal, fresh	58	15	.73	1.33	33.5

^{1/} The factors for calcium and iron were based on suggestions by H. C. Sherman, Chemistry of Food and Nutrition 1946. The others were based on the various investigations reported in the literature that provided a basis for relating vitamin content to protein content.

Fortified foods.--Specifications for many foods used by the armed forces include fortification with certain nutrients. In most cases the minimum level named in the specification is entered in the table and the fact that the product has the added nutrients is shown in the description of the item.

Enriched flour.--The minimum levels for the required nutrients covered by the Federal enrichment legislation for flour have been entered in these tables, as follows: Thiamine 2.0 mg., riboflavin 1.2 mg., niacin 16 mg., and iron 13 mg. per pound. Vitamin D, an optional ingredient, is not included in these tables, and it has been assumed that manufacturers ordinarily do not add calcium, another optional ingredient, except in self-rising flours.

Self-rising flour.--As usually prepared, self-rising flour contains dicalcium phosphate, although sometimes a sodium salt is used. Self-rising flour containing the calcium salt is estimated to have approximately 1,235 mg. of calcium per pound, and this figure appears in the table. The minimum amount required for enrichment is only 500 mg. per pound, and hence both the enriched and the unenriched self-rising flours, as customarily prepared, have more calcium than the minimum level for enrichment.

Bread and rolls.--Data on the composition of two breads for the armed forces, made with enriched flour and labeled as Field and Garrison products, are included in the table. The data are based on analyses made several years ago of breads used by the Army, but are believed to approximate current products.

Several kinds of plain and enriched commercial breads and rolls also have been included, because bread used in some training areas is obtained at local bakeries. The nutritive values for these products have been calculated from formulas considered typical of present-day commercial practices. Included are formulas with little or no nonfat milk solids and with 2, 4, and 6 percent, flour basis (pounds of milk solids per 100 pounds flour). Present information indicates the average amount of milk solids in breads containing milk is between 3 and 4 percent (flour basis). Bread made with 4 pounds of milk solids to 100 pounds of flour contains approximately 2-1/2 percent of milk solids in the fresh loaf after baking. A significant portion of the calcium content of bakery breads may come from a mold inhibitor, and in the calculations for commercial white bread it was assumed that 0.2 pound of calcium propionate was used to 100 pounds of flour accounting for about 110 mg. of the calcium figure in the table.

In calculating the nutrients for enriched bread it has been assumed that the breads were made with unenriched flour and that the minimum amounts of the nutrients needed to meet the proposed Federal Standards for enrichment in addition to the amounts contributed by the ingredients of the formula would be supplied by adjusted enrichment preparations. However, if enriched flour was used along with significant quantities of nonfat milk solids, the level of these nutrients, riboflavin especially, would be higher. The effect of increasing milk solids by 2-percent increments may be observed by comparing the nutrient content of the unenriched breads having nonfat milk solids at the different levels specified.

Breakfast food cereals often include one or more of the following nutrients: Iron, thiamine, riboflavin, and niacin. Except for enriched farina and enriched grits, there are at present no Federal Standards for addition of nutrients, either as to the nutrient that may be added or its level in the finished product. Values for the breakfast foods with added nutrients shown in these tables are averages of composition data reported for a number of commercial products having the same generic classification and approximately the same level of added nutrients. Before using these data in any particular calculation, it would be well to check information given on the packages of several kinds in the current market to see if values in the table are applicable.

Canned foods.---Composition data are based on canned foods as ordinarily purchased unless otherwise specified and do not take account of extreme storage or handling conditions nor of reheating losses. Canned foods would be expected to lose significant amounts of their vitamin values if subjected to very high temperatures for several months. Under such circumstances the thiamine values for the canned meat, fish, and poultry items probably should be reduced to approximately one-third of the values shown and the thiamine and ascorbic acid values of the canned fruits and vegetables to approximately two-thirds of the values in the table.

Data on canned vegetables are presented on three bases: (1) On the total or net contents of the can, or a composite sample of liquids and solids as they occur in the can, to be used when both solids and liquids are eaten; (2) on drained solids only, for use when the weight of the item is in terms of the drained portion; (3) on total net weight when the liquid is treated as refuse. Federal specifications for drained weights of No. 10 cans effective July 1950, or in process of publication at that time, or in common use by government agencies were used in conjunction with data on net weights published by the National Canners Association ^{3/} to obtain figures for proportion of solids.

Frozen foods are included in this table because of their wide use. The data shown were based on summaries of analyses so far as possible, but for some items it was necessary to impute data either from another form of the same food or from a similar food.

Application of Data in the Table with Special Reference to Refuse

The data in the table are applicable to products having the percentage refuse specified in the second column of figures. The composition values may be multiplied directly by the weight of a food in pounds to estimate the nutrient values provided by the edible portion of the raw food.

Refuse figures shown refer to the percentage of the total weight of inedible material such as bones, pits, and shells usually discarded in preparing food. For some foods the figures include portions that could be eaten but as a rule are discarded, for example, potato parings and tough outer leaves of vegetables. (See note on canned vegetables for treatment of canning liquids.) For fruits and vegetables, data on refuse have been based in general on products in good condition; the figures would not apply in instances where peeling and trimming are excessive, nor to products with excessive bruising, insect infestation, or rot.

For any particular item the figure for refuse may be too high or too low for military situations. In such cases, if the percentage refuse is known and differs significantly from the figure cited, a correction may be made by adjusting the weight of the food before calculating the nutritive values, which is simpler than recalculating each value on the basis of a different refuse content. At the same time, allowances for food loss due to such causes as shipping damage, spoilage, and pilfering, also may be added to the corrected figure for refuse to give a figure for the percentage of the total part unused. The new weight of food to be multiplied by values shown in the table can be found from the following formula:

$$\frac{100 \text{ minus new percentage of} \quad \text{actual adjusted weight of food to} \\ \text{unused part}}{100 \text{ minus percentage refuse} \quad \text{shown in this table}} \times \text{weight of food procured} = \text{be multiplied by composition data}$$

^{3/} Net contents statements for canned food labels revised 1949.

To illustrate, if the refuse for a food is actually 35 percent and the table shows only 25, and if in addition the loss in the supply of that item is estimated at 5 percent, the total unused portion of food is 40 percent, and the nutritive values based on a supply of, say, 150 pounds should be calculated by considering the weight to be only 120 pounds:

$$\frac{100 - \overline{35} + \overline{5}}{100 - 25} \times 150 = 120$$

The table below shows the approximate adjustment at 5-percent intervals to be made in the weight of each 100-pound unit of food. Directions for use are as follows:

In left-hand column find percentage refuse figure cited for item. In heading find the corrected figure for percentage refuse and/or loss. The new factor is found where the two lines intersect. Multiply this factor by the weight of food actually procured and move the decimal point two places to the left. The result is the new weight to use for multiplying the calorie and nutrient values in the composition table.

Table of correction factors for adjusting weight of food procured when percentage refuse in the food composition table does not apply

Refuse figure in table	Corrected percentage refuse and/or loss														
	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75
Percent	Correction factors														
0	95	90	85	80	75	70	65	60	55	50	45	40	35	30	25
5	100	95	89	84	79	74	68	63	58	53	47	42	37	32	26
10	106	100	94	89	83	78	72	67	61	56	50	44	39	33	28
15	112	106	100	94	88	82	76	71	65	59	53	47	41	35	29
20		112	106	100	94	88	81	75	69	62	56	50	44	38	31
25			113	107	100	93	87	80	73	67	60	53	47	40	33
30				114	107	100	93	86	79	71	64	57	50	43	36
35					115	108	100	92	85	77	69	62	54	46	38
40						117	108	100	92	83	75	67	58	50	42
45							118	109	100	91	82	73	64	55	45
50								120	110	100	90	80	70	60	50
55									122	111	100	89	78	67	56
60										125	112	100	88	78	62

Estimation of Energy Value

Calories are the units used for expressing food energy. In this publication as in Agriculture Handbook 8, calories have been calculated by multiplying the number of grams of protein, fat, and carbohydrate present in the food item by the factors shown on the next page. For items consisting of a mixture of foods, the factors for the different ingredients were weighted in the relative proportions used to make the final products.

Specific Physiological Energy Factors for Calculating the Calorie Values of Foods

Food or Food Group	Physiological energy factors to be applied to the nutrients in foods		
	Protein	Fat	Carbohydrates (by difference)
	Cal./gm.	Cal./gm.	Cal./gm.
Meat, poultry, fish	4.27	9.02	1/
Eggs	4.36	9.02	3.68
Milk, milk products	4.27	8.79	3.87
Fats, animal:			
Butter	4.27	8.79	3.87
Other animal fats	---	9.02	---
Fats, vegetable:			
Margarine	4.27	8.84	3.87
Other vegetable fats and oils, hydrogenated fats..	---	8.84	---
Sugars, sirups, and other sweets:			
Cane or beet sugar	---	---	3.87
Glucose, other monosaccharides	---	---	3.68
Honey	3.36	---	3.68
Jams, jellies, marmalades, preserves	3.36	8.37	3.87
Molasses, other table sirups	---	---	3.87
Cereals and other grain products:			
Barley, light	3.55	8.37	3.95
Bran (almost wholly bran)	1.82	8.37	2.58
Bran (40 percent) flakes	1.82	8.37	3.26
Bran, raisin	2.20	8.37	3.34
Buckwheat flour, dark	3.55	8.37	3.95
Buckwheat flour, light	3.78	8.37	3.95
Corn flour	3.46	8.37	4.16
Corn flakes	3.46	8.37	4.16
Corn grits, degermed	3.46	8.37	4.16
Corn meal, whole ground, unbolted	2.73	8.37	4.03
Corn meal, whole ground, bolted	3.10	8.37	4.10
Corn meal, degermed	3.46	8.37	4.16
Crackers, graham	3.59	8.37	3.78
Crackers, soda, plain	4.23	8.37	4.12
Farina	4.05	8.37	4.12
Macaroni, spaghetti	3.91	8.37	4.12
Noodles, egg	3.91	8.80	4.12
Oatmeal, rolled oats	3.55	8.37	4.07
Popcorn	2.73	8.37	4.03
Pretzels	4.00	8.37	4.12
Rice, brown	3.41	8.37	4.12
Rice, white or polished	3.82	8.37	4.16
Rice, flakes, puffed	3.82	8.37	4.16
Rye meal or whole grain	3.05	8.37	3.86
Rye flour, dark	3.00	8.37	3.82
Rye flour, medium	3.23	8.37	3.99
Rye flour, light	3.46	8.37	4.07

1/ Brain, heart, kidney, liver, 3.87 calories per gram; tongue, shellfish, fish products, 4.11 calories per gram.

Specific Physiological Energy Factors for Calculating the Calorie Values of Foods--Continued

Food or Food Group	Physiological energy factors to be applied to the nutrients in foods		
	Protein	Fat	Carbohydrates (by difference)
	Cal./gm.	Cal./gm.	Cal./gm.
Cereals and other grain products--Continued			
Rye wafers	3.05	8.37	3.86
Starch	3.87	8.37	4.12
Tapioca	3.87	8.37	4.12
Wheat, 97-100 percent extraction	3.59	8.37	3.78
Wheat, 85-93 percent extraction	3.78	8.37	3.95
Wheat, 70-74 percent extraction	4.05	8.37	4.12
Wheat and malted barley cereal	3.32	8.37	3.86
Wheat germ	3.59	8.37	3.78
Wheat--flaked, puffed, rolled, shredded, whole meal.	3.59	8.37	3.78
Other refined cereals	3.87	8.37	4.12
Wild rice	3.55	8.37	3.95
Beans, other legumes (pulses); nuts:			
Soybeans--flakes, flour, grits	3.47	8.37	1.68
Other legumes, nuts	3.47	8.37	4.07
Vegetables:			
Beans and peas, immature, shelled	3.47	8.37	4.07
Mushrooms	2.43	8.37	1.24
Potatoes, sweetpotatoes, starchy roots	2.74	8.37	4.03
Other underground crops <u>2/</u>	2.74	8.37	3.84
Other vegetables	2.44	8.37	3.57
Tomatoes, tomato products	3.36	8.37	3.60
Fruits:			
Lemons, limes	3.36	8.37	2.70
Other	3.36	8.37	3.60
Beverages:			
Beer	3.55	---	3.98
Carbonated beverages	---	---	3.87
Coffee, soluble product	---	---	3.68
Tea, soluble product	---	---	3.68
Miscellaneous:			
Alcohol <u>3/</u>	---	---	---
Cocoa, chocolate	1.83	8.37	1.33
Gelatin	3.90	9.02	---
Glycogen	---	---	4.11
Vinegar	---	---	2.45
Yeast	2.91	8.37	3.35

2/ Vegetables such as beets, carrots, onions, parsnips, radishes.

3/ 6.93 calories per gram; may not be used by the body like other sources of energy.

Notes on Proximate, Mineral, and Vitamin Content of Foods

Water.--A column for water content has been put next to the name of the item as this information is used frequently in designating foods or in differentiating between products used by the armed forces and the comparable civilian items.

Water content includes volatile substances in addition to free water. Most of the figures for moisture have been based on change in weight of a sample before and after heating to constant weight, in some cases in a vacuum oven, in others by air drying.

Protein values have been calculated from nitrogen content, nearly always total nitrogen, by applying suitable conversion factors such as those published by Jones ⁴/₄. Counted with the true protein are other nitrogenous compounds such as free amino acids and the purine bases. In cases where the nonprotein nitrogen exclusive of amino acid nitrogen is fairly large, the figures for the protein content of the food have been adjusted to more nearly represent the sum of the true protein and amino acids present.

Fat refers in the main to ether-extractable materials, including various fatty acids, sterols, chlorophyll, and other pigments or substances of similar solubility in addition to the glyceryl esters of fatty acids or true fats.

Carbohydrate, frequently referred to as "total carbohydrate by difference," is the term that has come to be used in this country to apply to the balance of the constituents not determined directly; it is the difference between 100 percent and the sum of the percentages of protein, fat, ash, and water. In addition to the sugars and starches which the body uses almost completely it includes other forms of carbohydrate such as fiber and pentosans, which the body utilizes to a lesser degree if at all. Included also are other substances that are not carbohydrate, such as organic acids.

Calcium data shown in this table represent the total amount present in the edible portion of the product. The question of how to treat the calcium content of foods containing relatively large amounts of oxalic acid remains debatable, and the possibility that all the calcium may not be available because of the presence of oxalic acid is noted in a footnote.

Iron content of foods reported in this table likewise applies to total iron in the edible portion rather than to available iron.

Vitamin A values in these tables are expressed in International Units. They have been based in part on biological assay and in part on physical or chemical determinations of vitamin A itself or its precursors. The physiological equivalence of vitamin A and of the carotenes having vitamin A activity has posed difficult questions. Scientists are not in agreement as to how much carotene is equivalent to an International Unit of vitamin A. For these tables, values expressed as micrograms of carotene were converted to I.U. of vitamin A on the basis that 0.6 microgram of beta carotene and 1.2 micrograms of other carotenes having vitamin A activity were equivalent to 1 I.U. of vitamin A. The problem of deriving suitable values for practical use in evaluating human diets is still further complicated by differences in availability of carotene from different food sources. Experimental work with laboratory animals and human subjects has shown that the carotene in some foods is nearly all available and in others only one-third or less is available. Future revisions of vitamin tables probably will require considerable change in vitamin A figures.

⁴/₄ Jones, D. B. Factors for converting percentages of nitrogen in foods and feeds into percentages of protein. U.S. Dept. Agr. Cir. 183, 22 pp. 1941. (Sl. rev. ed.)

B vitamins.--Methods of extraction and assay for the three B vitamins (thiamine, riboflavin, niacin) included in these tables are still in the process of development. Modifications of the preferred methods are resulting in greater sensitivity and precision and consequently in better agreement among methods. Results of applying the improved procedures have not as yet been reported for a great many foods; consequently many of the values in these tables are based on older methods. There is still considerable doubt concerning the adequacy of present methods for the release of the bound forms of riboflavin; anomalous values are occasionally reported for the retention of this vitamin in foods that have been subjected to heat. Niacin values in these tables were derived from data in the literature measuring nicotinic acid, nicotinamide, and related active compounds.

Ascorbic acid values reported here have been based for the most part on determinations of reduced ascorbic acid, because this was the form reported by most workers and is the form in which nearly all of this vitamin occurs in fresh foods. Products that have undergone storage or processing, however, often contain significant quantities of the oxidized form (dehydroascorbic acid). Data on total ascorbic acid were used when authors reported values for both the reduced and the dehydro forms. Since data for estimating total ascorbic acid were far less often reported, the figures for the vitamin C value of the foods may be too low. On the other hand, for foods that contain interfering substances which react chemically like the vitamin but do not have the same physiological activity, the values may be too high. These interfering substances are found especially in foods having a high carbohydrate content that have been subjected to heat or unfavorable storage conditions. Continued research on methods and application of the improved procedures are needed to show to what extent present data need revision.





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